Know Your Medicines: The implementation of a patient-centred service in community pharmacy

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Know Your Medicines

The implementation of a patient-centred service in community pharmacy

Grace Bloomer

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Know your Medicines

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"I hereby certify that this material, which I now submit for assessment for the Project Dissertation Module on the MSc in Healthcare Management is entirely my own work and has not been submitted as an exercise for assessment at this or any other University."

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We gain strength, and courage, and confidence by each experience in which we really stop to look fear in the face……..we must do that which we think we cannot. (Eleanor Roosevelt).

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Abstract

The statistics in relation to non-adherence to prescribed medication make for stark reading. Non-adherence to medication is costing European governments an estimated 125 billion annually and is contributing to the premature deaths of nearly 200,000 Europeans every year (IPU, Pfizer and IPA, 2014). The overall aim of this project was to introduce a patient- centred service that would improve adherence to prescribed medicine in the writerôs place of work, community pharmacy.

A literature review was conducted by the writer to identify the advantages and challenges associated with patient-centred care, the methods of introducing patient-centred services were also reviewed. The HSE model was chosen to articulate the change in a systematic and structured approach; the four stages included in the change model are initiation, planning, implementation and mainstreaming.

Evaluation of the project included a mixed method approach. This included questionnaires, observation and informal interviews. Kirkpatrickôs model of evaluation was used to evaluate the educational aspects of the project.

Overall, the main objectives of the project were achieved. The change process resulted in an improvement in patient engagement and medicines adherence. Pharmacists welcomed the opportunity to develop their professional role and counselling skills. The ñknow your medicinesò service provided an opportunity for pharmacist and patient collaboration. Moreover, the service was perceived as beneficial to patients and will be further disseminated to the entire organisation before the end of 2015.

1. Introduction

The purpose of this organisational project is to improve the rate of non-adherence to prescribed medication through the introduction of a patient-centred service. According to the World Health Organisation (WHO, 2003) 50% of patients fail to adhere to prescribed medicine when long term medication is prescribed**.**

Furthermore, a report into non-adherence to medicines was published in 2014 by Pfizer Ireland, the Irish Pharmacy Union, and the Irish Patients Association. The report highlighted forgetfulness, side effects and patient perception as the most common reasons for non-adherence to medication. The report also revealed that the factors which lead to patients taking their medication as prescribed are; the patient engaging with their doctor regularly, understanding their condition and having a good understanding of the medication (IPU, Pfizer and IPA, 2014). Given the above data, the writer felt it important to look at the area of medication adherence within their area of employment, community pharmacy.

This change project is titled ñKnow your Medicinesò and was carried out in four community pharmacies across Dublin and Limerick. The project provided patients with an opportunity to discuss their medication and to acquire the appropriate advice and information from their pharmacist. The pharmacies are part of a large pharmacy group that currently consists of eighty-seven pharmacies. The individuals involved in the project are four community Pharmacists, the care services co-ordinator, (The writer) and the health strategy manager. Given the writerôs contacts within a wide demographic, they decided to use this to their advantage and based the change

project across the Dublin and Limerick area. The change initiative commenced in September 2014 and finished in March 2015.

This dissertation will be presented in five chapters. In this chapter, the writer highlights the background and rationale for carrying out the organisational development project. The associated aims and objectives are outlined, and the writerôs role in the project will be explained. In chapter two, the main themes related to the literature review will be extracted from selected articles. The review themes will provide a critique of the literature and further substantiate the rationale for change. Chapter three explores the methodology and methods used as part of the organisational development process. The relevant steps for change are structured using the Health Service Executive (HSE) change model. Chapter four discusses the project evaluation through qualitative and quantitative data collection and analysis. Finally, Chapter five reviews the findings from the organisational development project. This chapter will include organisational impact, strengths and limitations of the project and conclude with the overall findings of the change project.

1.2 Organisational Context

An improvement concerning medication adherence would not only have a positive impact on health outcomes, the organisation would also benefit financially from repeat prescription business. While the writerôs primary aim was to improve patient-centred care and adherence to medication, this aspect encouraged the organisation to further support the project. However, the attitudes, behaviours and practices of the Pharmacists would have to change to ensure the new process was feasible. The new process would translate to an increase in pharmacist and patient interaction, hence the ñknow your medicinesò service would change the process through which pharmacists and patients engage.

The writer was aware that it would require ñbuy-inò from pharmacists and patients for the project to succeed. The questionnaire that was completed by the patient and pharmacist during the ñknow your medicinesò service established the patientôs actual use of medication and identified areas of ineffective use. The main stakeholders were the pharmacists; patients; superintendent pharmacist; and the health strategy manager.

The organisation agreed to the implementation of this project in four community pharmacies which meant an increase in the key stakeholderôs workload across the participating pharmacies. During the pilot phase, the writer collaborated with the four community pharmacists participating in the project and reported data to the health strategy manager within the organisation.

The purpose of this data collection was to ascertain the value of adherence questionnaires. The expected outcome was an increase in medicines adherence through an improvement in patient education, advice and counselling.

Additionally, the percentage of repeat prescription items was also measured. The target had been set at a 2% increase in prescribed items. On completion of the pilot, a business case for a full organisational roll-out was presented to members of the senior management team. This included the health and financial benefits of the service, estimated budget and resources required to complete the project and the anticipated time frame. The organisation currently consists of eighty- seven pharmacies.

Ethical Approval

The Royal College of Surgeons in Ireland (RCSI) ethical recommendations contained in the dissertation guidelines was referred to prior to commencement of

the project. The change project was implemented within the writers place of work; therefore the writer sought approval to carry out the change from the superintendent pharmacist employed by the organisation. In this circumstance, ethical approval was not required by the organisation. In adhering to the RCSI ethical guidelines, the writer submitted a letter that confirmed such to the RCSI ethics committee.

This organisational change project was in line with the pharmacistôs legal obligation to ensure each patient had been offered sufficient advice and counselling on the use of their medication (Retail Pharmacy Business Regulations, 2008). As this organisational project was conducted in collaboration with the pharmacist in their professional role, ethical approval was not a requirement.

According to Cohen et al. (2007), questionnaires can be persuasive, intrusive, and time-consuming for the participant; therefore the writer outlined clearly that the service was entirely optional for patients. The data obtained from the questionnaire was securely stored at all times and was only accessible to the participating pharmacists and the writer. Furthermore, all participating patients provided their full consent by signing a consent option contained in the ñknow your medicinesòform.

1.3 Rationale for carrying out the change

The regulatory requirements contained in the pharmacy business regulations (2008) outline that prior to the dispensing of each prescription and prior to the supply of medicinal products concerned, the pharmacist must review the prescription concerning the pharmaceutical and therapeutic appropriateness.

Furthermore, the document also outlines that each patient should have sufficient information and advice for the proper use of the prescribed medicinal product and shall offer to discuss such with the patient or the carer of the patient.

While this is a regulatory guideline and best practice, it is not always standard procedure in community pharmacies. Through qualitative analysis, the writer has observed the supply of medication to patients without appropriate advice and counselling. The explanation for this could be the added pressure associated with working in a community pharmacy in recent years. Community Pharmacies have been affected by considerable cuts in fees paid to pharmacists by the HSE through the Financial Emergency Measures in Public Interest (FEMPI) Act, 2009. This has led to the shift from a margin model to a volume model that has led to an increase in workload and a decrease in resources. The introduction of this change project will not only improve adherence to medication, it will also encourage pharmacists to develop their professional role and skills through an increase in patient engagement.

A similar service was added to the NHS pharmacy contract on 1st of October 2011. The service provides support for patients with long-term conditions and newly prescribed medicines to improve medicines adherence. It was agreed after the pilot period that this service would be continued into 2014/15. NHS employers envisaged that the successful implementation of this service would indeed develop the role of the pharmacist through increased patient engagement and also an improvement in patient adherence that will generally lead to improved outcomes (PSNC Main site, 2014). The NHS version further substantiated the rationale for change and provided the writer with a tangible benchmark.

1.4 Aims and Objectives

1.4.1 Aim:

The aim of this development project is to improve low adherence to prescribed medication through improved advice and counselling. This will enhance treatment outcomes and ensure the patient has been given the appropriate information on the use of their medicines.

1.4.2 Objectives:

1. To gather quantitative and qualitative data through a ñKnow your medicinesò questionnaire. This will inform through analysis; process and behavioural changes that will lead to an improvement in patient care.
2. To encourage repeat prescription customers to return to the organisation. The target has been set at a 2% increase in prescribed items.
3. To improve the rate of non-adherence by changing the process in which pharmacists engage with patients.
4. The questionnaire will be rolled out to four pharmacies before the end of January 2015 as a trial project.

1.5 Role of the student in the organisation and project

The writer is the care services co-coordinator for a large pharmacy group in Ireland. Their role as part of the care services team is to implement medicines management

systems in managed care settings and to review their effectiveness concerning regulatory requirements and safety continuously.

This project is an extension of their role and directly linked to the care services strategy. The writer directed this project during each stage and ensured sufficient support was provided to those involved, in this case, pharmacists and patients. This support included engaging and regularly communicating with the key stakeholders and taking their feedback into account. This allowed the writer to make any necessary improvements and amendments during the pilot phase so that an entire organisational roll-out would be efficient and practical. The project is directly related to patient-centred care which is an area the writer is immensely committed to.

1.6 Summary and Conclusion

In summary, the consequences of non-adherence to prescribed medicines are reduced health outcomes and added healthcare costs. This service will improve patient knowledge and adherence through verifying the patientôs actual use of medication and resolving inappropriate use.

It will also provide an opportunity for the patient to discuss any concerns or apprehensions they may have, hence developing the skills and role of the pharmacist. This is a fundamental factor in ensuring the health-care professional is providing an adequate contribution to the patientsôwelfare and maintaining their duty of care. Moreover, if adherence to medication improves prescription items will increase. Thus, impacting positively on the organisations prescription item revenue.

2. Literature Review

2.1 Introduction

Before commencing an organisational change project, the writer needed to complete a literature review of the topic area.

The purpose of the literature review was to identify, analyse and critique the literature associated with such a change. This information provided the writer with the current research findings and limitations in their selected area. After in-depth research of the articles stored in the Emerald database, the main areas of focus were identified as the following:

- Patient Engagement
- Patient Education and the effect on medication adherence
- Health Coaching

The method in which the writer carried out the search is discussed below under the heading search strategy.

2.2 Search Strategy

The emerald database was chosen as the primary research tool for articles as it offered a comprehensive list of associated literature. Google scholar was also used as a research tool as it provided a broad search of several databases. The initial search reviewed journals wrote after 2009. However, the writer found this information limited so decided to broaden the search to articles published after 2004. Older references found in the bibliographies of the selected articles were also reviewed; this allowed the writer to identify seminal articles in this area. The search terms and

keywords used included; ópatient engagement, ócompliance ô óadherence ô ópatient educationô ócommunity pharmacyô ómedicines managementô ópatient -centred careô This is a review of the literature that encompasses and evaluates the transition to patient-centred care. The inclusion criteria for this review comprised of systematic reviews, meta-analysis reports, and randomised controlled trials. In particular, the review focuses on the rationale behind the change to NHS community pharmacy contracts in 2005, which sought to reward more patient-centred services (Latif, Pollock and Boardman, 2011). The writer also looked at literature outside the UK, studies published in Finland, the Netherlands and Canada was also reviewed. The subsequent themes are discussed by the writer under the below headings, patient engagement, patient education and health coaching.

2.3 Review Themes

2.3.1. Patient Engagement

"Engaging patients in their healthcare and encouraging people to take responsibility for protecting their health are now seen as the best way to ensure the sustainability of health systems" (Coulter, 2006).

Patient engagement is not merely linked to patient participation in decision -making; patient engagement refers to working collaboratively with the individual on a partnership level (Gruman et al., 2010).This relationship requires understanding rather than solely an information seeking activity; which the literature defines as paternalistic (Greenall, 2006). Furthermore, patient engagement encourages patient

-centred care which is integral to improving outcomes and the overall quality of care (Luxford, Safran and Delbanco, 2011).

In contrast, however, the literature highlights the correlations between patient engagement and improved patient outcomes but also emphasises the absence of scientific evidence and relevance to excellence in clinical care (Coulter and Ellins, 2007).

A systematic review carried out over 25 years verified the correlations between communication interventions and improved health outcomes. The studies suggest that patients need to feel that their complaint has been discussed completely and that they are actively contributing to decisions about their care (Stewart, 1995). In addition, the studies reviewed indicate that effective communication and engagement not only impact on the emotional health of the patient but also on ñ*symptom resolution* and *physiologic status"* (Stewart, 1995).

However, critics of shared decision- making would argue that too much information has an adverse effect on outcomes, and those uncertainties inherent in medical care could be harmful (Coulter, 1997).While engaging patients in the level of care delivered to them may lead to improved outcomes, the ultimate responsibility for the care they receive should remain with the healthcare professional (Davis et al., 2007).

Evidence from the literature suggests that although patients wish to be involved in their care and treatment options they ultimately rely on the healthcare professional to make decisions on their behalf (Levinson et al., 2005). Effective patient engagement encourages the health care professional to make a decision that encompasses the values and wishes of the patient. The relationship between the healthcare

professional and patient should be non-hierarchical and based on mutual respect so that common goals can be achieved (Coulter, 1999).

A study carried out in association with the Picker Institute revealed that while the UK are committed to patient-centred care, data results were less positive in comparison to other countries involved. Data collected through the use of a survey in the UK, Australia, Canada, New Zealand, Germany and the USA was used to evaluate performance in relation to Patient engagement. This study concluded that the changes made to UK policies in recent years have not had the anticipated effect on professional/patient relationships (Coulter, 2006).

A review of the literature highlights the various barriers to patient engagement; from both a professional and patient perspective. A study published in 2008 examined the attitudes of community pharmacists towards medicines use reviews. While the article highlighted the value of pharmacists engaging with their patients; it also acknowledged various barriers. These included the time to complete a medicines review, and also the availability of a suitable consultation area (Latif and Boardman, 2008). From a patient perspective, ña *lack of interest"* and ñ*time*ò is noted as a barrier to effective engagement and appropriate counselling (Albekairy, 2014).The literature reasons that healthcare professionals must develop their behavioural skills and health coaching abilities to engage patients in their care (Barnett and McDowell, 2012).

Patient Education

2.3.2. The effect on medication adherence:

Inadequate adherence to prescribed medication is common and often leads to an increase in healthcare expenditures, hospitalisations and reduced quality of life (IPU Pfizer IPA, 2014).Patients are more likely to adhere to a medication when they understand the implications of non-adherence and when they believe adherence will improve their condition. Hence, healthcare professionals play a crucial role in helping patients to understand their condition, the advantages of treatment and addressing any apprehensions (Bourbeau and Bartlett, 2008).

Moreover, studies show that the way in which information is communicated to patients contributes to their level of understanding and the likelihood of adherence. A meta-analysis published in 2009 highlighted the correlation between clinician communication and adherence. There was a 19% higher risk of non-adherence among patients whose clinician did not explain treatment appropriately (Haskard Zolnierek and DiMatteo, 2009).

More recently, a study carried out in Finland addressed the impact of patient education on self- management. Findings from the study highlighted the correlation between patient education and patient-centred care. In the case of chronic conditions, patients will have a lifelong dependency on healthcare and medication. Therefore, there should be an emphasis on patient education so that the patient has the knowledge and understanding to adapt their behaviour to their condition (Mikkonen and Hynynen, 2012). However, the writer acknowledged that this study is only reflective of a small sample size, so the results are not without limitations.

A more comprehensive review published by Vermeire et al. (2001) outlines that adherence is a complex problem, especially for patients with chronic conditions.

While the findings outline the link between professional and patient education as an important factor in compliance; it was also noted that this aspect is difficult to evaluate.

Nonetheless, a randomised trial conducted by Lee et al. (2006) measured the effect of a pharmacy- led education programme on adherence to medication associated with continuing disease. The trial focused on 200 patients who were over 65 and were taking at least four medications. This initiative was carried out from 2004 to 2006 and included basic medication education and pharmacist intervention. This included standardised education around medication, regular pharmacist follow-up and dispensing medication in a monitored dose pack. Baseline data was retrieved after two months and again after six months, the results showed an increase from 61.2% adherence to 96.9% (Lee, Grace and Taylor, 2006). This study reinforces the correlation between patient education and adherence. Conversely, looking at this study from a critical point of view, sustainability seems to be the difficult part to evaluate. In this particular paper, adherence dramatically improved but only for the duration of the project. The literature illustrates the importance of health coaching in encouraging sustainability of appropriate care and adherence to treatment (Greenall, 2006).

2.3.3. Health Coaching

"Health Coaching can be defined as helping patients gain the knowledge, skills tools and confidence to become active participants in their care so that they can reach their self-identified goals" (Bennett et al., 2010).

The literature describes Health Coaching as a collaborative paradigm that encourages individual self-management. Self-management is essential for patients to extend their treatment and health- care into their everyday lives (Bennett et al., 2010).

This requires a substantial level of support from the professional as patients and families must be trained to manage their care. The patient should understand the various aspects of self- management; using the medication correctly, monitoring important symptoms, dietary changes and adjusting to physical limits. The literature summarises that this will enhance the coordination of care, improve health outcomes and reduce hospitalisations (Bodenheimer et al. 2009).

A randomised trial published in 2003 analysed the effects of patient coaching on patients commencing with anti-depressants. The aim was to analyse psychological symptoms and adherence by means of a coaching programme by community pharmacists. The results presented a significant reduction in anxious and depressive symptoms; analysis showed that the intervention was particularly successful in patients with a lower education status. They concluded that pharmacist coaching is an effective way to improve adherence, and this approach is acceptable to patients (Brook et al., 2003). A collective process bridges the gap between evidence -based Medicine and ñthe real worldò(Vale et al., 2002).

This approach has become part of the most recent changes to NHS policies. Structured education programmes have been shown to add significant value to health outcomes (Deakin, 2011). The X-Pert insulin programme is provided to patients over a six -week period and incorporates patient education and self-management skills. The implementation of this project has shown an improvement in

diabetes self-management, resulting in the Glycaemic control and considerable savings to the NHS (Deakin, 2011).

Similarly, a study carried out by Diamond and Chapman (2001) found that intervention programmes that incorporate patient education and health coaching can influence symptomatic improvement and appropriate self-management skills. This study measured the effectiveness of an asthma clinic day that was implemented across a chain of community pharmacies in Canada; the design included the use of a questionnaire, individual patient counselling and education. In the 4080 patients assessed, baseline data revealed 22.2% of patients were using inadequate inhaler technique. 16.4% were using a short- acting beta2 agonist excessively, and 21.0% were not using an inhaled corticosteroid as needed. Thirty days after the intervention, patients reported an improvement in asthma symptoms. The self-management behaviour was more controlled with a significant increase in the use of preventative medication (Diamond and Chapman, 2001).

However, concerning the cost effectiveness of a pharmacy intervention programme, a Danish study by Bosmans et al. (2007) found that the increase in adherence was not significant enough to invest in the additional resources required.

Nevertheless, a report published by Ovretveit (2011) advocates that although evidence in this area is limited, improvement initiatives can decrease costs to the healthcare providers and improve the overall quality of care. The research argues that these initiatives require careful planning, expertise and high -quality implementation (Marshall and Ovretveit, 2011).

2.4 implications for the project

The literature review provided a comprehensive overview of patient-centred care which further substantiated the rationale behind this organisational change project. The writer considers the literature in favour of patient centred care to be more convincing.It is apparent, patient engagement, patient education and health coaching are distinctly linked in and collectively lead to improved patient outcomes.

However, in many of the studies reviewed; intervention programmes led to enhanced health outcomes for the duration of the project but failed to promote sustainability on completion. Many led to an improvement in patient education and patient engagement but failed to provide the patient with the necessary self-management skills for future sustainability. The literature also revealed the perceived barriers to patient-centred care; these factors including time and lack of patient interest will be taken into account prior to the implementation of this project so that the success of the change is not hindered.

2.5 Summary and Conclusion

The writer conducted a literature review of patient ï centred care, this review identified patient engagement, patient education and health coaching as the main review themes. In summary, the findings from the literature promote the progression of patient-centred care initiatives. When care is focused on the patient, the overall quality of care is improved. The review has also helped to form the change process by providing the writer with the essential information to introduce such a change within their organisation. The following chapter, chapter three provides an overview of the methodologies used during the change process. The process is structured using the HSE model of organisational change.

3. Change Process

3.1 Introduction

This organisational change project is concerned with improving medication adherence in a community pharmacy setting, identifying reasons for non-adherence and ineffective use of prescribed medicine through the introduction of a patient-centred service. In discussing change efforts, Kotter (2005) outlines that 70% of change initiatives fail. Further to this, the limited success of these change efforts may be due to the absence of a change model (Leeman, Baernholdt and Sandelowski, 2007).It is apparent, even the best change efforts require a model to guide and articulate the change into practice (Cohen, 2005)

In this chapter, the writer will provide an overview of the methodology and methods used as part of the change project. The writer will describe the various phases through the application of the Health Service Executive (HSE) model of change. The phases included in this model are initiation, planning, implementation and mainstreaming. The rationale for deciding on this particular change model will also be provided.

3.2 Organisational Change

Change is an unavoidable element in all organisations.Businesses must adapt and respond to new challenges so that they continue to grow and cope with external factors (Kotter, 2009). According to the World Health Organisation (2000), change is particularly significant in healthcare organisations; despite constraints and fewer resources patient expectation has increased, and there is a greater demand for higher quality care.

For the most part, change is required due to necessity or in response to problems (Gittins and Standish, 2010). Irrespective of the need for change, there must be an internal desire and vision for change. Kotter (2005) refers to this as creating a sense of urgency. He contends that change should have a structured approach that requires time, preparation and various phases. Regardless of how well planned organisational change is the success of the project may be hindered if the culture is disregarded (Werkman, 2009).Culture is a core element in every organisation as it reflects the common behaviours and beliefs of those employed there (Parmelli et al., 2011). Therefore, if these aspects are overlooked during the change; the context of the change process may be misinterpreted by the change agent. Hence, employee resistance and lack of change sustainability is probable (Anders and Cassidy, 2014).

3.3 Change model selected for this project

In 1947, Kurt Lewin created one of the original models of change. He recognised three stages of change; unfreeze, change and refreeze. Kotter (1996) further developed Lewinôs model with an eight-step model. The model consists of eight steps and commences with creating a sense of urgency, building a guiding team, creating the vision for change, empowering staff, creating short- term wins, staying persistent and making the change permanent. Kotter contends that skipping any of these stages only creates the illusion of speed but ultimately never produces the desired outcome (Kotter, 1995). While both models have apparent similarities, Kotterôs eight step model provides more comprehensive guidance and structure for implementing change. Kotter puts a vast emphasis on the importance of the team, communicating the vision and celebrating short -term wins.

Similarly, the Senior and Swailes OD model of change (2010) incorporates every part of the organisation and the individuals employed there. While creating a vision for the future is also a key component in this model, the emphasis focuses on the change agent. The change agent is at the centre of the model and is responsible for driving the change forward. Thus, in the context of this model the change agent is ultimately responsible for the success or failure of the change.

Although the writer appreciates the importance of the change agent during change they also recognise the complexities of healthcare. The Healthcare sector tends to be more reactionary than strategic as it is forced to respond to external factors. Consequently, in the context of healthcare, change is not linear; it is a continuous and adaptive process that can be affected by people and external influences (HSE, 2008).For this reason, the writer resolved that the HSE model of change would be the most suitable model to guide their project. To further confirm that this model was the most appropriate choice, the writer performed a SWOT analysis associated with such. (Appendix 1) The Health Service Executive Model (HSE) consists of four main elements, Initiation, Planning, Implementation and Mainstreaming. Each category also contains sub-categories that offer further clarity and guidance.

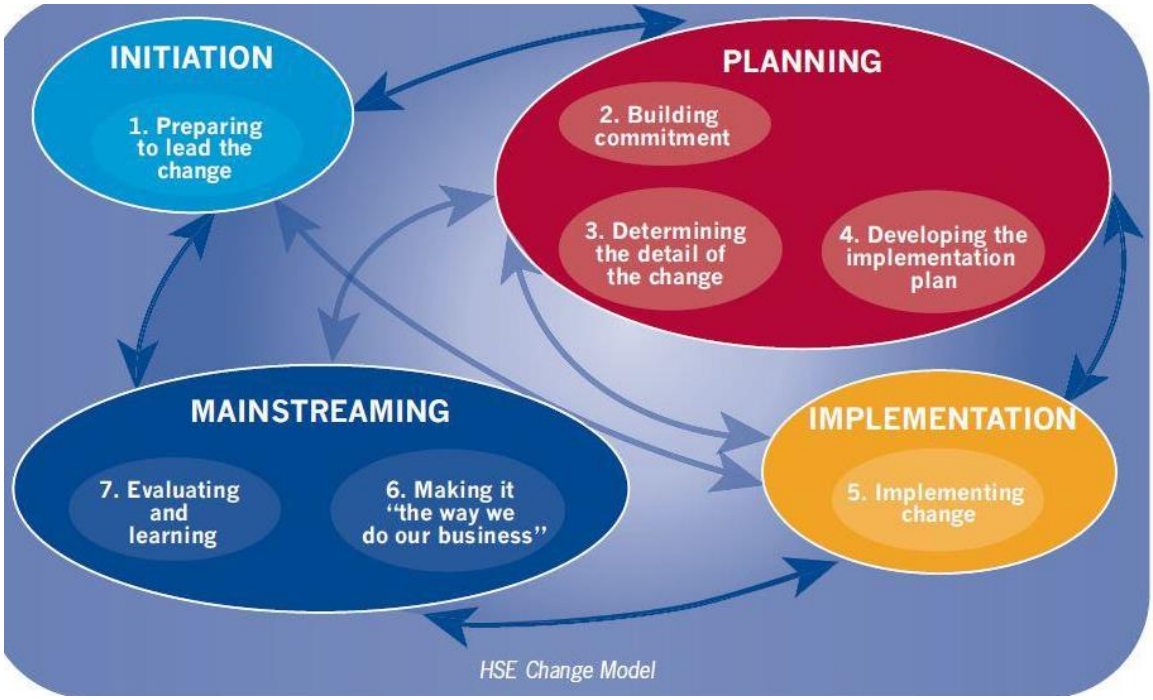

Figure 1: HSE change mode

In the remainder of this chapter, the writer will elaborate on the various stages of the project using the structure of the HSE model of change.

3.4 Initiation Stage

3.4.1 Preparing to lead the change

The first stage of the HSE model is initiation; during this stage the writer performed various analytical tools including SWOT, PEST, Stakeholder and a Force Field Analysis. The data from these tools identified the drivers and resistors for change and also highlighted the possibility of successful change. A SWOT analysis is commonly used for analysing strengths and weaknesses; this information can then be used to develop strategy and aid in decision-making (Kajanus et al., 2012). In this case, the SWOT (Appendix 2) was performed to identify areas for action. The paramount strengths associated with the project included senior management

support and the NHS version. The writer used both factors to reduce the effect of identified weaknesses such as time to complete the questionnaire and conflicting projects. As this project was supported by senior management; the writer could make it a priority for the pharmacists involved. The NHS version was advantageous in the design phase and also in providing evidence of project value. This was used to influence key stakeholders and to reduce resistance.

The PEST tool was used to analyse external factors such as political, external, social and technological. (Appendix 3)The PEST analysis was a paramount element in the preparatory stages as it highlighted the key drivers for change and outlined environmental factors.According to (Johnson et al.), these aspects have a high impact on the success or failure of the change project. The PEST analysis revealed that there was an immense opportunity to create a patient- centred service that would have a positive impact socially and economically.

The Force Field Analysis (Appendix 5) outlined the key drivers for and against change. While the key drivers deemed more significant than the forces against change, the forces against change could not be disregarded. The writer acknowledged that forces, not in favour of change such as the time to complete the questionnaire, and pharmacist resistance could have an unfavourable effect on the project. These factors were also considered significant in the literature review. To reduce the effect of these resistors, the writer put the focus on pharmacist participation in the planning stages. It is imperative that managers engage and include clinicians in organisational change; interaction is required from both groups in order to succeed (Bååthe and Erik Norbäck, 2013).

Planning Stage

3.4.2 Building Commitment

The planning stage of the project involved bringing the key stakeholders together to present a business case and communicate the change. The writer attended the monthly pharmacist forum to present data from the force field analysis. This was a beneficial tool as it included the key drivers for change, and the overall aim and benefits of the ñKnow your Medicinesò service. Kotter (2010) emphasises the importance of communicating the vision for change and getting buy-in from those involved, he maintains that if the change is not communicated effectively, the change will not succeed. However, the writer acknowledged the threat of over-communication. The objective of the pharmacist forum meeting was to examine the barriers and achieve buy- in from key stakeholders. Johnson, (2010) contends that these groups can create over analysis and debate rather than the delivery of change. Hence, the writer deemed the force field analysis highly valuable as it outlined the key drivers for change and created a framework for the meeting.

The pharmacist forum was a suitable platform to present the questionnaire as it was a non-formal setting that encouraged open discussion and feedback. Although a draught version of the adherence questionnaire was presented, the writer sought pharmacist advice on the final questionnaire design and detail of the change. The writer hoped that by including the key stakeholders in the design and development of the project, they would gain their expertise and build commitment. According to Kotter (2008) employee participation is vital during the design and implementation phase, this will build commitment and avoid resistance. It was also anticipated that this would promote effective change during the transitional period and promote sustainability (Narine and Persaud, 2003).

Determining the detail of the change:

Overcoming Resistance:

The detail of the change was negotiated and prepared over several weeks. The writer continued to use the pharmacist forum meetings to engage with the pharmacists involved; this deemed valuable in deciding on the final version of the questionnaire (Appendix 7) and preparing for the roll out.

Conversely, pharmacist resistance was still evident at these meetings. According to Kotter (2008) it is extremely common for managers to encounter some form of human resistance during organisational change efforts, and they must assess the reasons why. While the consensus was in favour of the service, time to complete the questionnaire was still an apparent obstacle. Pharmacists also raised concerns concerning patient interest; they believed the level of interest might not be high enough to support a successful project.

Further to this, the writer acknowledged that the project required a change to the current culture; although time and lack of patient interest were outlined as resistors to change. The writer recognised that the core cause of resistance was related to the anticipated change in culture. Culture is not as receptive to change in the way new processes are (HSE,2008). Hence, it was imperative as a change agent to manage the general feeling of uncertainty and understand their resistance.

However, the writer did not consider this reaction to be entirely negative as according to Ford (2008), resistance to change can be positive if it leads to open conversation and discussion. While the conversations were not completely positive, the writer acknowledged that this was an indication of progress; and that these responses were reflective of engaged participants (Robbins, 2005).

For many pharmacists, managing their current workload leaves them with little time for intervention and reflection. Additionally, unlike other healthcare professionals, it is not as common for pharmacists to engage in note taking. Therefore, for the change to be successful; the participation, engagement and commitment of pharmacists were highly significant in changing the delivery of care (Werkman, 2009).

The management of work- related stress:

It was, therefore, necessary for the writer to consider the participantsô current workload and to avoid added strain that could ultimately lead to change ñburn-outò According to Handy (1993), one of the primary situations that lead to stress in organisations is conflicting projects. It was, therefore, imperative for the writer to consider the consequence of added work stress and to manage the situation appropriately. Though, according to Grandey (2000), not all work related stress is negative; many individuals may use stress to perform to their maximum potential.

In contrast, however, while this is advantageous for the manager, employees are likely to perceive stress as unfavourable (Robbins, 2005). With this in mind, the writer decided to adopt a supportive management style, this approach according to Dubrin (2010) ñ*enhances morale when group members work on stressful tasks"* p141. While certain amounts of stress may lead to work alertness and competence to react suitably.The long- term impact of stress will eventually impede productivity and performance will decline (Handy, 1993; Robbins, 2005).

Hence, in order to gain buy- in, the writer offered to attend each pharmacy and assist with the pilot. This collaborative approach encouraged additional engagement and assisted in persuading the group towards the same goal. Gallup (2014) describes this leadership approach as visioning; this creates a convincing picture of the future

that inspires others in the organisation. In this circumstance, the writer wanted the stakeholders to envision how valuable this service was to patients, and that the time it required to complete each questionnaire was worthwhile. In contrast, however, Gill (2003) would argue that an over- emphasis on management and an absence of leadership may lead to the failure of a change initiative; he argues that although management is important; leadership makes the difference in the delivery of change. However, in this instance the writer considered this approach to be the most appropriate as they wanted to take a supportive approach to change. It was agreed that a collective pilot would take place in each pharmacy prior to implementation.

Piloting

It was paramount that the writer piloted the questionnaires. Through piloting the questionnaires beforehand, it gave the writer increased insight into problem areas for the participants, in this case, pharmacists and patients. It was also necessary for the writer to test the questionnaire for validity and practicality. According to Marshall, (2005) piloting is essential before the questionnaire is administered to the research sample, reliability and validity of the questionnaire needs to be consistent and dependable. However, according to van Teijlingen & Hundley, (2002) although piloting may increase the likelihood of success, it does not guarantee success in the main project. It was, therefore, essential that the writer considered this and did not become complacent during the implementation stage.

Communicating the pilot- project

Once the pilot dates were agreed, the writer formulated the communication strategy for patients. It was imperative that patients were aware of the ñKnow Your Medicinesò service. It was agreed that a window display would be used to highlight the opportunity for patients to discuss their medication with their pharmacist.This was

designed by the writer and health strategy manager. (Appendix 6) It was also agreed that the pharmacists involved would actively promote the service and approach patients with a probability for non-adherence to prescribed medication.

Structured Questionnaires

The design and content of the questionnaire were based on the Belief in medicines questionnaire (BMQ). This questionnaire is a flexible tool that can be used to assess beliefs and concerns in relation to the use of prescribed medication. The patient results are scored using a five-point Likert scale that provides a score ranging from 5-25. High scores equal high perceived sensitivity to adverse effects of medication and, therefore, a likelihood to be non-adherent (Horne, Weinman and Hankins, 1999), (Neame, 2005). Similarly, The New Medicines Service launched by the NHS in 2011 was based on this concept so was also referenced during the design phase. Thirty questionnaires were distributed to patients during the pilot; the questionnaires contained a Likert scale of options such as always true and never true. The benefit of using this style of research is the results are easily quantifiable and subjective to mathematical analysis (Muijs, 2004). However, the writer was conscious of the data gathered through this medium, as Loxley (2010) states that a Likert scale method ñhas the potential for biasò Therefore, it was paramount that mixtures of quantitative and qualitative methods were used to collect information from the patient. With this in mind, it was decided that the questionnaires would not be self-administered. The following figure represents the scoring scale on the ñknow your medicinesò questionnaire.

	Scoring system					Your Score
Questions	0	1	2	3	4	
1. Do you always take your medicines?	Always	Most of the time	Not sure	Sometimes	Never	3
2.Do you understand why you are taking your medicines?	Always	Most of the time	Not sure	Sometimes	Never	1
3. Do you understand when to take your medicines?	Always	Most of the time	Not sure	Sometimes	Never	2
4. Do you experience any side effects?	Always	Most of the time	Not sure	Sometimes	Never	
5. Do you feel in control of your condition?	Always	Most of the time	Not sure	Sometimes	Never	
6. Do you feel your condition impacts your lifestyle?	Always	Most of the time	Not sure	Sometimes	Never	
7.Do you feel you know everything about your condition?	Always	Most of the time	Not sure	Sometimes	Never	
8.Are there times that your condition gets you down?	Always	Most of the time	Not sure	Sometimes	Never	

Figure 2: Questionnaire scale

3.4.2 Developing the implementation plan

Pilot Results

The results of the pilot were communicated at the following pharmacist forum meeting. With regard to pilot data, the questionnaire results correlated with the report published in 2014 by Pfizer Ireland, The Irish Pharmacy Union, and the Irish Patientôs Association. Similarly, side effects, forgetfulness and a lack of understanding were the most common reasons for non-adherence in the pilot sample. Moreover, there was a 100% participation rate from those asked to complete the questionnaire. This result challenged pharmacist perception of patient interest and also various articles that maintained the lack of patient interest as a threat to adherence questionnaires (Latif and Boardman, 2008) (Albekairy, 2014).However, the writer is aware that their pilot was only reflective of a small sample size so is not without limitations.

The writer used this data to persuade and influence those involved that this was indeed a worthwhile service and could improve medicine adherence and, therefore,

patient health outcomes. Nevertheless, the pilot was not without flaws and the writer highlighted these at the meeting so that a more practical and efficient implementation could be considered.

As the time to complete the questionnaire was still a concern, it was decided to create a more structured approach. Data from the pilot revealed asthma patients would particularly benefit from additional support from the pharmacist.There was a high percentage of patients using their inhalers incorrectly and experiencing side effects. Hence, it was decided that the questionnaire would be used to improve the rate of non-adherence in this one cohort. It was agreed at the forum that this approach would be easier to implement and evaluate.

3.4.3 Implementation

Implementing Change

At this stage of the change process, the agreed actions determined in the planning stage should be implemented, and the manager should provide clarity around commencement dates and sufficient communication with staff and service users (HSE, 2008). According to Nielsen and Randall, (2009) even the most promising change initiatives have been unsuccessful as a result of poor implementation, managers should be available to assist in change and create a supportive environment.

With this in mind, the writer engaged again with several key stakeholders to ensure the actual implementation was communicated and managed appropriately. This involved meeting with the superintendent pharmacist to discuss the structure and detail of the ñknow your medicinesò clinics and then communicating such to the pharmacists involved. A window display and pharmacist recommendation were used

to communicate the service to asthma patients; this approach was undertaken as it had been successful in the pilot phase.

On the day of each clinic, the writer demonstrated their support by attending the pharmacy and meeting with the patients involved. The questionnaire was completed to determine the patientsôprobability to be adherent, the pharmacist then invited the patient to demonstrate their inhaler technique and discuss their medicines. This allowed the writer and pharmacist to ascertain the patientsôactual use of medicine and provide appropriate advice and counselling to resolve areas of concern and ineffective use. On completion, a patient review meeting was set up for March. This provided the writer with an opportunity to evaluate the success of the service. Questionnaire one and two were compared to measure the impact of patient counselling and advice. Further detail on the evaluation will be provided by the writer in chapter four.

Sustaining Momentum

At this stage, the first phase of implementation was complete, and review meetings were set up to review the patientsôprogress. As the follow- up meetings were not due until the following March (eight weeks post initial questionnaire) it was vital to maintain enthusiasm amongst stakeholders and patientsô Concerning sustainability, staff involvement and attitude towards the change are fundamental factors (Doyle et al., 2013).Hence, It was imperative that communication was consistent and those involved were given clarity on their roles (HSE, 2008). With this in mind, the writer regularly communicated with the pharmacistsôinvolved to reinforce the importance of the review meetings, and to ensure they had the support and resources to complete them. The writer also advised the pharmacistsôto communicate with their patientsôin advance of their review meeting to ensure they attended for follow-up.

3.4.4 Mainstreaming

Making it ñthe way we so our businessò

This stage focuses on the success of the change initiative and sustaining new ways of working (HSE, 2008). With this in mind, the writer acknowledged the significance of engaging with those involved and congratulating them on their efforts towards change. Kotter (1995) refers to this as celebrating short- term wins. The writer contacted each employee individually thanking them for their time and participation with the asthma clinics. This was integral in preventing the loss of momentum and encouraging participants to remain engaged in the change process (Kotter, 1995).

A meeting was also arranged to gather their feedback in relation to moving forward with the project. When leading the organisation to sustainable change, it is necessary to consider the balance between the needs of those involved and the needs of the organisation (Bovey and Hede, 2001). Therefore, it is vital that the change agent communicates and regularly engages with those concerned; this allows feedback to be acknowledged and increases the likelihood of embedding the change into everyday activities (HSE, 2008).

Based on this principle, the writer then arranged a meeting with the Health Strategy Manager within the organisation. The purpose of the meeting was to communicate pharmacist and patient feedback and discuss the implications for the project. In order for the integration and embedding of change to be possible, lessons learned, and dissemination of best practice is crucial (Shigayeva and Coker, 2014). As pharmacist and patient time were a prevalent threat to future sustainability, the following changes were agreed.

Change	Process	Outcome
Reduce the time it takes to run an asthma clinic.	All new asthma patients will receive a ñKnow your medicinesò questionnaire.	Asthma patients will automatically be given a questionnaire- asthma clinics were deemed too time-consuming.
Develop a way to identify existing asthma patients.	Generate a patient report on the dispensary system and develop a three- month plan to approach each patient.	This will incorporate the questionnaire into daily pharmacist activities using a realistic timeframe.
The questionnaire not restricted to pharmacist use.	Pharmaceutical technician trained to complete the questionnaire with patients.	The pharmacist will be consulted to offer advice and counselling- time will be saved in completing the questionnaire.

Evaluating and Learning

At this stage of the change process, the writer changed their focus to reflect on the change process and to acknowledge positive and negative aspects related to such. Evaluation is a formal method of identifying learnings and is deemed valuable in reviewing the change process and determining aspects that require further development or variation (HSE, 2008).

With this in mind, the writer communicated and regularly engaged with key stakeholders throughout the project and on completion. The feedback obtained through these discussions was a paramount factor in refining the process and establishing best practice for the future. Concerning future sustainability, methods of evaluation should be in place and directly aligned with the change strategy (Epstein Roy, 2001). The following chapter presents the evaluation methods and results.

Conclusion

The aim of this change project was to improve patient knowledge, adherence and use of their medicines through the introduction of a patient-centred service in community pharmacy. The writer reviewed various change models before deciding on the HSE model of change. This change model provided a comprehensive framework for implementing the change and included the use of various analytical tools such as SWOT, PEST, stakeholder, force field and stakeholder analysis. The use of these tools helped to inform the project and also provided data to persuade key stakeholders towards change. The final stage of this chapter concluded with a brief overview of the evaluation. This will be discussed in greater detail in the following chapter, chapter four.

4.0 Evaluation

4.1 Introduction:

While all change improvements require change; the key to successful change is evaluation. Evaluation encourages managers to ascertain the value of an intervention through the collection and examination of data (Øvretveit, 1998) and then deciding on areas for review and development (HSE, 2008). In the context of this change project, it was imperative to identify if the project worked well before replicating it on a more considerable scale. As discussed in chapter three, this improvement effort was implemented in four pharmacies and would be considered for a full organisational roll out if successful. This chapter is directly linked with the objectives outlined in chapter one of this dissertation.

4.2 Significance of Healthcare Evaluation:

It is extensively recognised that an understanding of evaluation is essential for health care professionals; those involved in healthcare delivery must evaluate their area of practice to ensure patients receive high -quality care. Moreover, continuous improvement and development of health services should be of high importance and embedded into routine practice(HSE, 2008).This has become paramount in recent years due to inconsistency in care provision, rising healthcare costs and increased emphasis on patient satisfaction (Conry et al., 2012). In the context of healthcare improvement, evaluation should consider the entire intervention from engaging with the patient to the expected changes in processes and outcomes (Parry et al., 2013; Donabedian, 2005).Therefore, the mechanisms for evaluation should be resourced appropriately and be in place at each stage of the improvement process (HSE, 2008).

4.3 Evaluation:

Numerous definitions of evaluation exist; many refer to Program and policy evaluation, others relate to improvement and results evaluation (Kahan, 2008). Lazenbatt (2002) describes evaluation as *"a method of measuring the extent to which an intervention has achieved its stated objectives*ò In healthcare, the stated objective is often an improvement in patient care through clinical intervention or improved service delivery. It is now recognised that improvement initiatives in patient care should be subject to evaluation to ascertain their effectiveness and in economic evaluations, their efficiency (Gerrish and Mawson, 2005).There are various approaches to healthcare evaluation. It is, therefore, imperative that the methods of evaluation employed are appropriate and aligned with the objectives of the

intervention. With this in mind, the writer reviewed various evaluation tools before deciding on the most suitable model to evaluate the project.

Evaluation Models

The CIPP (Context, Input, Process, and Product) model was developed by Daniel Stufflebeam in the 1970sô This model provides a comprehensive framework for guiding formative and summative evaluation that deems it appropriate at the beginning and on completion of a project (Frye & Hemmer, 2012; Kealey, 2010). The non-linear design and flexibility of the model allows it to be used in a variety of educational and non-educational settings. However, this model requires careful planning and multiple sets of data collection are required to use it successfully. Hence; the writer believed this model would be too time- consuming for the context of this project. Similarly, Jacobsô ten stage model considers the complexities of evaluation and allows the evaluator to adapt and modify their approach at each stage (McNamara et al., 2010). While, the writer, appreciated the non-linear and objective focused design; they omitted this model due to the complex evaluation process associated with such. Comparably, Kirkpatrickôs four-level model is extremely agile and can be modified to suit various scenarios. However, unlike the other two models the writer considered the clarity of the model and its transparent focus on educational outcomes (Frye & Hemmer, 2012). Consequently, the writer believed this model was the most suitable to evaluate their project.

Kirkpatrick Model:

Kirkpatrickôs four- level evaluation model remains the standard evaluation model for industry and business.It has made vast contributions to educational evaluation through its clear focus on learner behaviour in the context for which they are trained (Frye & Hemmer, 2012). The model not only considers learner satisfaction and

response to the program; actual behavioural changes in the learner and final results are also evaluated (Bates, 2004). The subsequent figure presents Kirkpatrick's evaluation model.

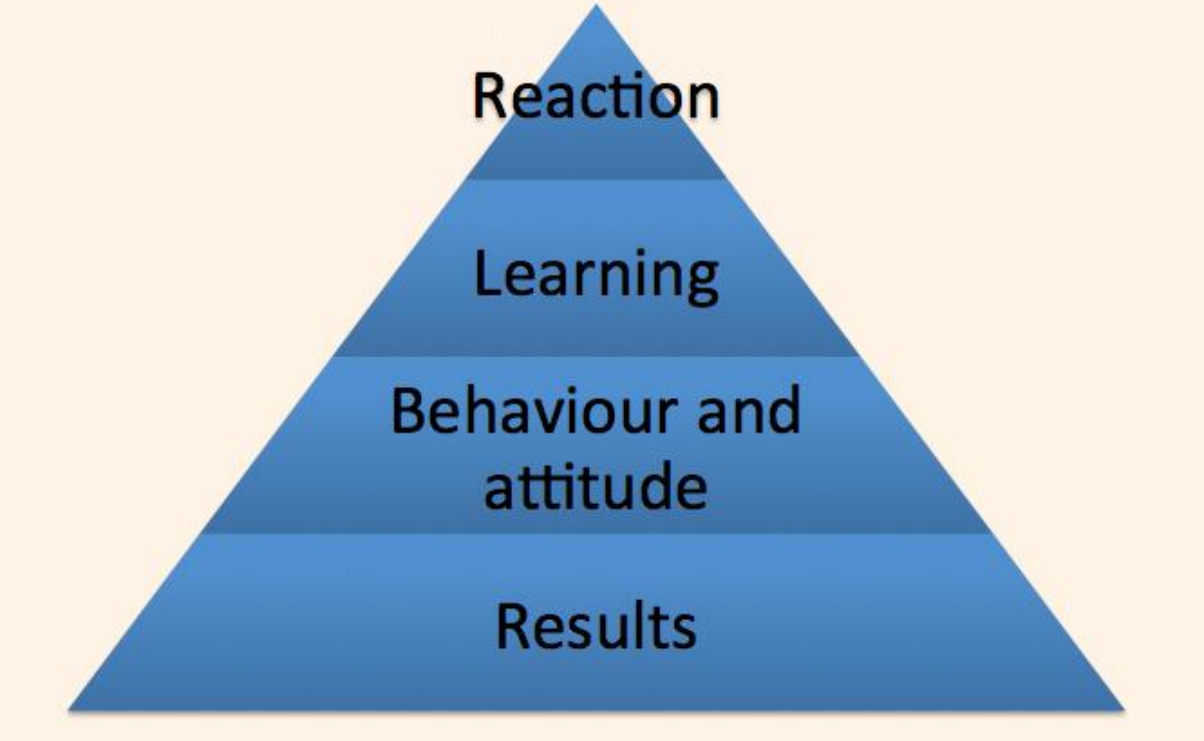

Figure three: Kirkpatrick Model

4.3.1 Aims:

The aim of the evaluation methods in this project was to ascertain whether the results successfully corresponded with the objectives outlined in chapter one. Moreover, the writer wanted to gain further insight into the project so that an expansion of the project would be effective and practical. In the next section, the writer will discuss the methods and measures of evaluation employed during the

evaluation period. Kirkpatrickôs model of evaluation was used to evaluate the educational aspects of the change project.

4.3.2 Methods and Measures:

Objective one: To gather qualitative and quantitative data through a "know your medicines" questionnaire. This will inform through analysis; process and behavioural changes that will lead to an improvement in patient care.

The objective was to improve the way pharmacistsôengage with patientsôthrough the introduction of a patient-centred service. The writer evaluated the participation rate in the four pharmacies through measuring the quantity of completed adherence questionnaires and gauging the reaction and behaviours of both pharmacists and patients. The writer believes this aspect of the objective was achieved, fifteen questionnaires were completed, and there was a 100% participation rate.

Level 1 – Reaction:

The aim of this level was to quantify how participants felt; the writer measured this through the process of qualitative analysis. An evaluation of verbal reaction was assessed using a series of informal interviews. On completion of each asthma clinic, the writer took the time to ask participants how they felt about the new process. This was an informal method in which three key questions were asked. Interviews, according to Fontana and Frey are ñ*one of the most common and powerful ways we try to understand our fellow human beings*ò (as cited by Denzin and Lincoln, 1998, p.47).

Table 1 below outlines an example of the questions used by the writer.

Question 1: Did you feel the questionnaire was beneficial?
Question 2: Did you enjoy participating in the project?
Question 3: How did the questionnaire benefit you?

Table 1: Reaction evaluation questions

Informal interviews were chosen due to accessibility and proximity to the core participants, in this case, pharmacists and patients. Informal interviews can also be extremely valuable as *"social cues, such as voice, intonation, body language, etc. of the interviewee can give the interviewer a lot of extra information*ò (Opendakker, 2006, P.1) However, this method of evaluation is not without limitations. The interviewer can often influence the participant and lead them to a certain direction without realising it, thus creating a bias in the data collection (Boynton, 2004). With this in mind, the writer made a conscious effort to avoid leading the participants and encouraging them to answer in their words.

To ensure accuracy and precision of information, the writer recorded the interviews with uncomplicated note-taking; this method is the most traditional and accepted method for capturing interview data (Zhang & Wildemuth, 2009). However, the writer was cognizant of collecting data through this method as according to Fontana and Frey (2005), note-taking may disrupt the general flow of conversation. With this in mind, the writer made brief notes during the interview and then completed a more detailed report directly after each interview.

Both pharmacistsôand patientsôexpressed a positive response in relation to the new service. Pharmacists appreciated the new variety to their role and the opportunity to engage with their patients. Through this new process, they were able to ascertain the

actual patient diagnosis, and resolve the incorrect use of medicine. Patients valued the opportunity to spend time with their pharmacist; it allowed them to ask questions relating to their medicines and also to address any concerns. However, the writer was conscious that this initial reaction may not be sustained. According to Yardley & Dornan (2011), this type of evaluation encourages general assumptions and is only suited to short-term designs. Therefore, it was essential to gauge reaction continuously so that sustainability of the change process was more likely.

Level two- Learning

Evaluation of pharmacist learning:

Learning evaluation is the measurement of the increase in knowledge and capability, before and after training. In the context of pharmacist learning, the writer evaluated their use of the questionnaire following training. This was conducted through observation. This allowed the writer to acquire first- hand information that did not depend on second- hand reports. Additionally, one of the key advantages of observation is its straightforwardness. According to Robson (2002) you do not have to spend time interviewing participants to gain insight, ñyou simply watch what they do and listen to what they sayò (p.191). Moreover, according to Johnson and Onwuegbuzie, (2004) it is common to become over reliant on questionnaires to reveal information. Hence, the use of observation evaluation in this context gave the writer greater insight into participant capability. However, as the participants being observed were the writersôcolleagues it was imperative to avoid observational bias. According to Bryman & Bell, (2011) this can affect the validity of the observation.The writer avoided this by maintaining an objective approach and avoiding generalisations.

At baseline, the pharmacistsô would not have utilised structured questionnaires to obtain information from patientsô Their initial approach would have been to offer the questionnaire without any consultation; it was, therefore, essential that each pharmacist was trained to conduct the questionnaire appropriately and to the same standard. After the training, their knowledge had improved immensely. This was evident through observing their level of capability and efficiency when using the questionnaire. It was also apparent that their level of competence developed further as they completed several questionnaires.

Evaluation of patient learning:

The underlying purpose of the ñknow your medicinesò questionnaire was to improve adherence to prescribed medicine through improving patient knowledge. This was evaluated by comparing Likert data.

The questionnaire was used to establish the patientsôbaseline knowledge in relation to their condition and medication usage. At baseline, the majority of patientsô participating in the project did not fully understand their condition or the function of their medication. In order to improve their baseline level of understanding, each patient was offered a single education session provided by their pharmacist. Each session included inhaler technique demonstration and information to encourage self-management. A review questionnaire was completed eight weeks later to measure the impact on patient learning. The following graphs present the baseline level of knowledge expressed by patients.

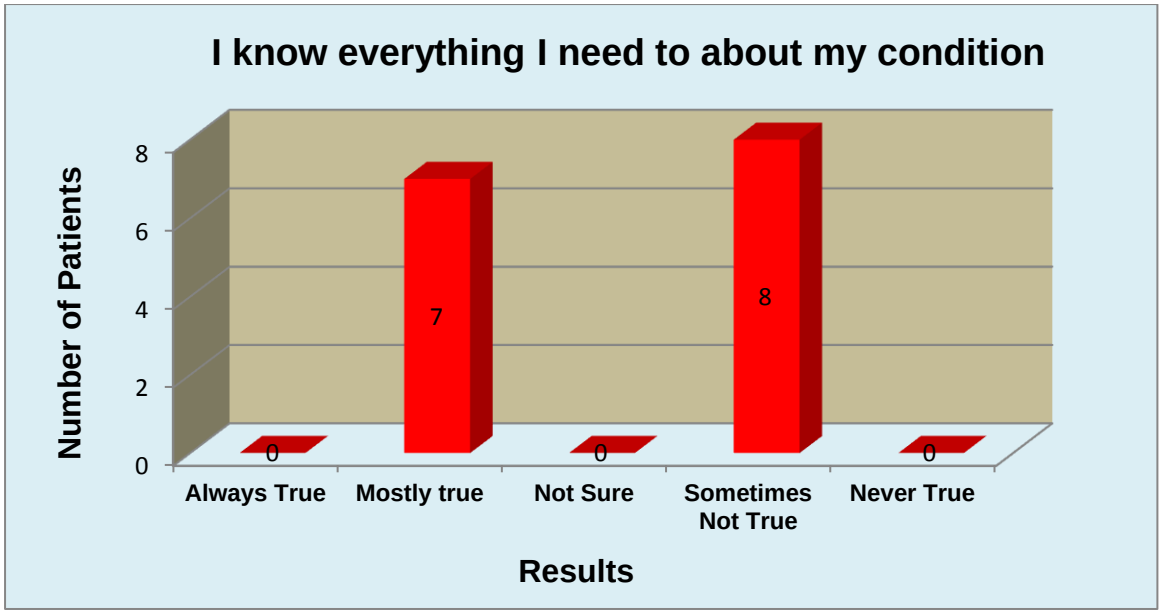

Figure Five: Likert scale results pre-intervention

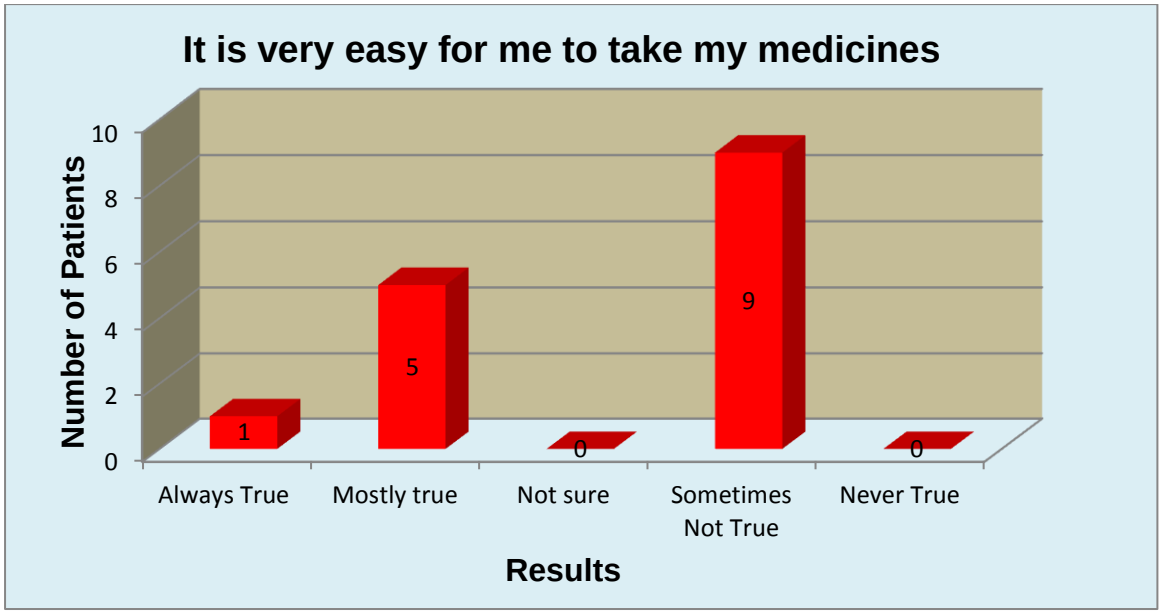

Figure six: Likert scale results pre-intervention

Level three- Behaviour

Behaviour evaluation is the extent to which the learnings are applied- back on the job. The writer was concerned with the sustainability of behavioural change. As

discussed in chapter three; this change required a cultural change to the behaviours of both pharmacistsô and patientsô It was vital that participants would not revert to comfortable behaviours once the initial change project was over. This behaviour is commonly referred to as the *“hawthorn effect”,* where individuals change or improve on an element of their behaviour in response to their awareness of being observed (Holden,2000).

It was, therefore, imperative to acknowledge the achievement of the change process (Kotter, 1995). and to also consider that organisations will continue to change; managers must provide clear lines of accountability and responsibility to promote sustainable change (HSE, 2008). Furthermore, according to Bird & Cassell (2013) behavioural evaluation is less easy to quantify; observation and interviews are required on an ongoing basis to reduce a subjective result.

However on observation, patient engagement did improve after the initial project. Pharmacistsô continued to connect and liaise with the patientsô involved.There seemed to be a genuine interest in how the patient was progressing post - intervention and this consequently led to the patient having a more proactive interest in their health.

Furthermore, out of the four participating pharmacists; all four provided the writer with recommendations for future use of the questionnaire, one pharmacist had also arranged to use the questionnaire in another healthcare setting. This particularly satisfied the writer as it was a reflection of sincere interest and buy-in.

Level Four- Results

Results evaluation is the effect on the organisation or environment resulting from the improved performance of the trainee. The aim of this level was to measure the quantifiable aspects of organisational performance. Although the percentage of prescription items did not increase within the time-frame of the project; a new service that added significant value to patient care was successfully implemented in four community pharmacies. This aim was achieved by the collective behavioural change of pharmacists as a result of training; the target of fifteen questionnaires in four pharmacies was achieved which proved the training worked. The service also encouraged retention of customers that led to repeat prescription items. This was evaluated using a repeat patient tracker recorded by the pharmacists involved (Appendix x). Of the fifteen patients participating in the project, only one did not return in February and March.

Objective two: **To encourage repeat prescription customers to return to the organisation. The target has been set at a 2% increase in prescription items.**

An associated objective of this service was to increase prescription items for the organisation through improving adherence to medicine. The writer evaluated this objective by performing a profit enquiry on the pharmacy dispensing system; the report gave prescription item details pre and post intervention. A profit enquiry was generated in January and in March to compare results. This objective was not achieved within the duration of the project.

Through analysis, the results revealed patients collected their medication every month despite not using it appropriately. This result correlates with the Pfizer report reviewed by the writer in chapter one as non-adherence õ*has major implications as*

much expenditure is in effect being wasted on medicines that are not being taken at all or taken incorrectly" (IPU Pfizer IPA, 2014).

However; the result of this objective is a representation of patientsô eligible for the GMS General Medical Services Scheme (GMS) scheme. Therefore, in the context of this sample size, the cost of medication was not an issue. The writer would maintain that the sample size and duration of the project may have affected this result. Further implementation of the project and a more continued effect on medication adherence should impact prescription items positively.

Objective three: To improve the rate of non-adherence by changing the process in which pharmacists engage with patients.

The objective was to measure if the percentage of medication adherence increased as a result of patient education and counselling. Patients were invited to complete the ñknow your medicinesò questionnaire pre and post intervention; this allowed the writer to compare questionnaire results.

Integral to the evaluation of this objective was the validity of data. According to Cohen et al. (2007) validity of data is a fundamental aspect of effective research. If the data is invalid, then it is deemed insignificant, he maintains that the use of suitable instrumentation may improve quantitative data validity.

As discussed in chapter three, a Likert scale method was chosen as it is the most commonly used method for measuring attitudes and therefore highly likely to provide a reliable result (Boynton, 2004). However, this method of evaluation is not without limitations; quantitative research has the potential for standard error and can be subjective to bias (Cohen et al., 2007). In order to enhance validity and decrease

invalidity, the writer piloted the questionnaires before rolling the questionnaire out to the four pharmacies. After the pilot, Likert scale questions were addressed due to lack of clarity and confusion. Further to this, Boynton (2004) recommends using a previously validated questionnaire. With this in mind, the belief in medicines questionnaire (BMQ) and the new medicines version used by the NHS were referenced by the writer during the design stage and before implementation.

The questionnaire used at baseline has been described in detail in chapter three. Related questions were used at baseline and after eight weeks (Appendix); this allowed the writer to compare data and assess the impact of patient engagement on medication adherence. The questionnaire was designed to measure the patientsô use of medication and their likelihood to be adherent. The subsequent graphs reflect the level of patient adherence at baseline.

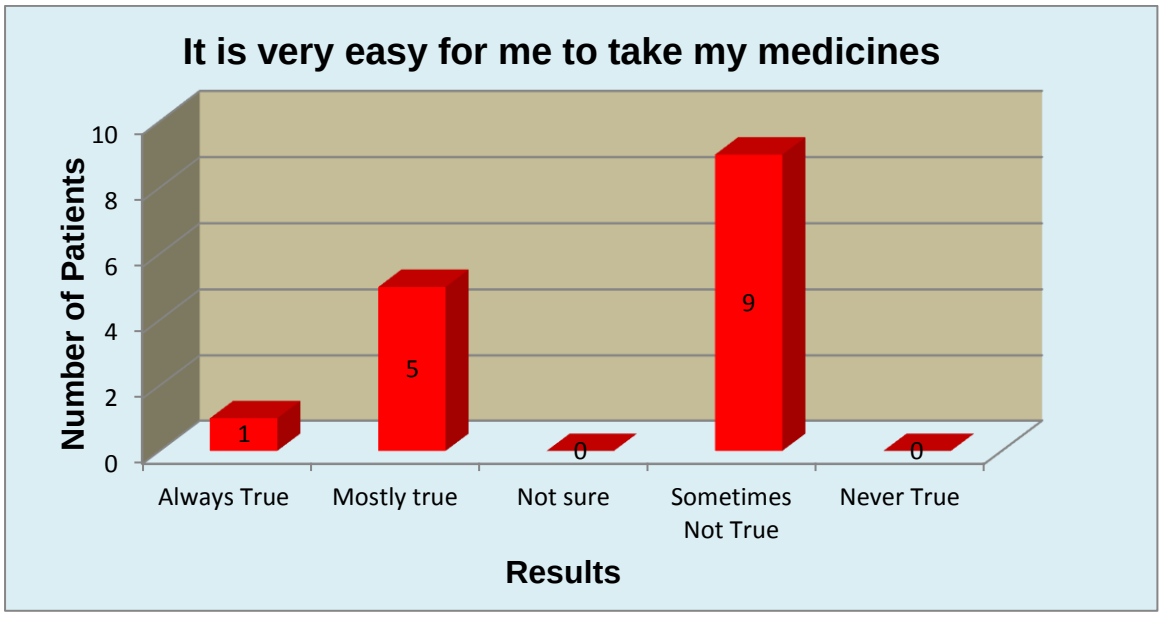

Figure Five-Likert Scale Result Pre-Intervention

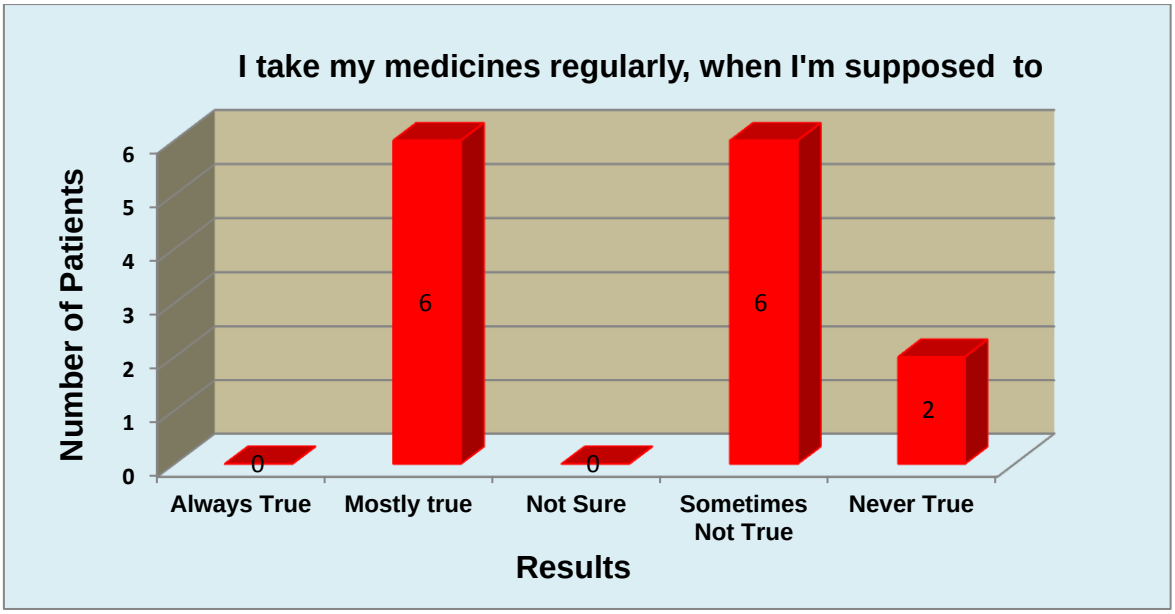

Figure Six-Likert Scale Result Pre-Intervention

Objective Four: The questionnaire will be rolled out to four pharmacies before the end of January 2015 as a trial project.

The objective was to roll out the ñknow your medicinesò questionnaire in four pharmacies before the end of January 2015. This objective was achieved entirely and the details associated with such are presented below in Table 2.

Pharmacy	Implementation date	Achieved
Pharmacy A	20-January-2015	Yes
Pharmacy B	21-January-2015	Yes
Pharmacy C	22-January-2015	Yes
Pharmacy D	23-January-2015	Yes

Table 2: Summary of implementation

4.3.3 Results:

The subsequent bar charts present the data collected post- intervention. The increase in medicines adherence increased significantly as a result of pharmacist intervention.

Validity and Reliability of data:

Validity refers to the appropriateness, as well as accuracy of data Cohen (2007). Reliability, on the other hand, refers to the concept that if the change project were conducted in another setting the results would be similar or different (Cohen et al., 2007). The writer is aware that this change project is reflective of a small sample size so is not without limitation. Hence, the results below are valid for the context of this project only. However, further dissemination of the questionnaire and service would further substantiate validity and reliability of results.

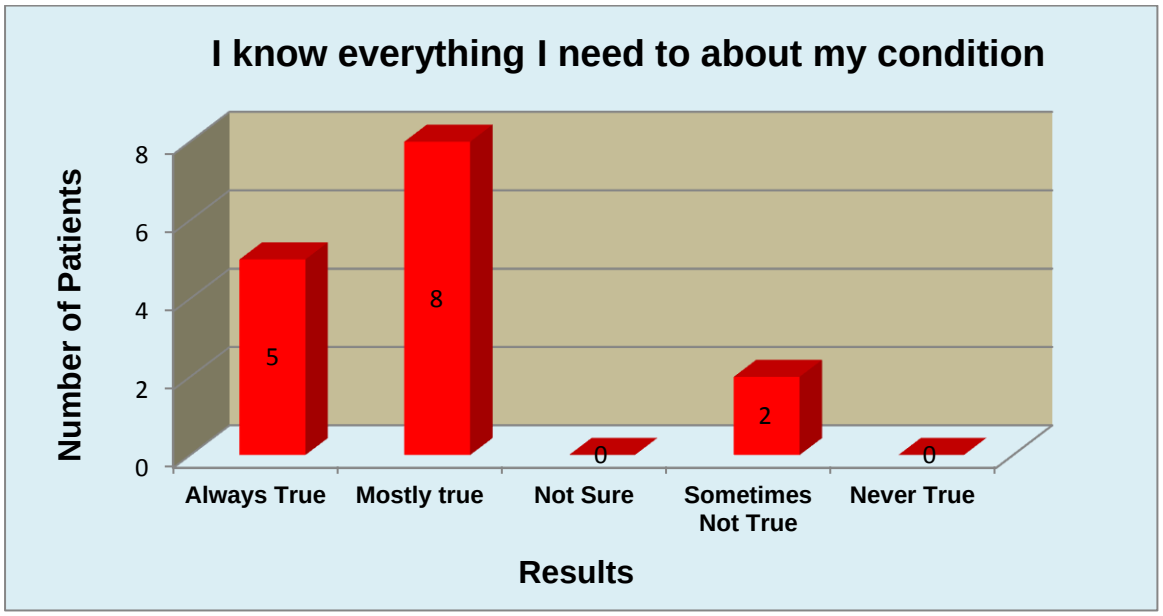

Figure Seven-Likert Scale Result Post Intervention

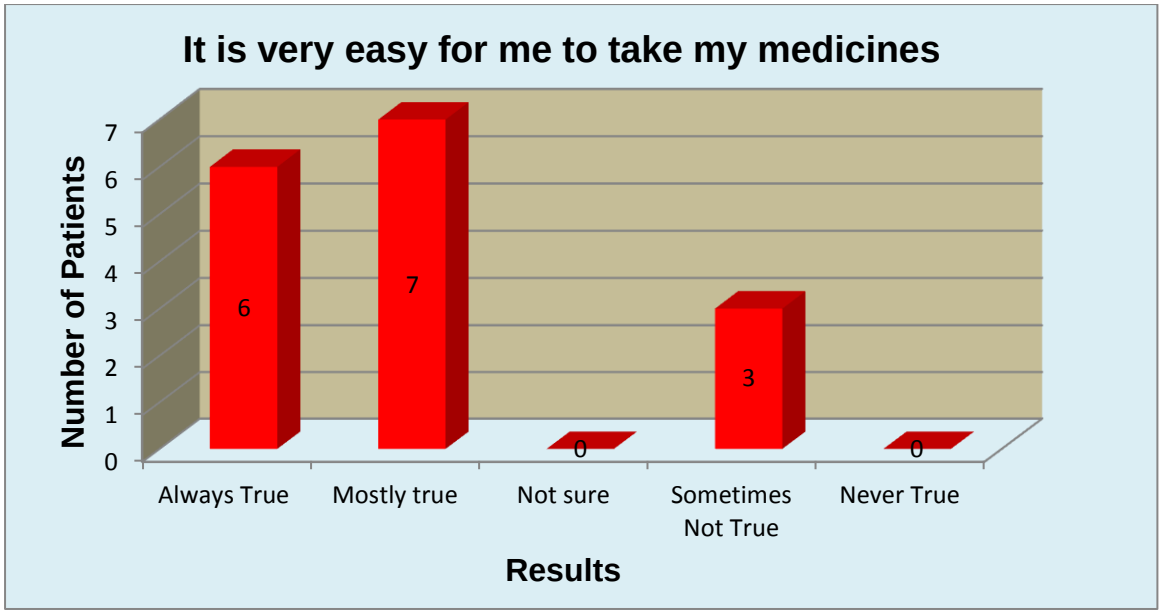

Figure Eight-Likert Scale Result Post Intervention

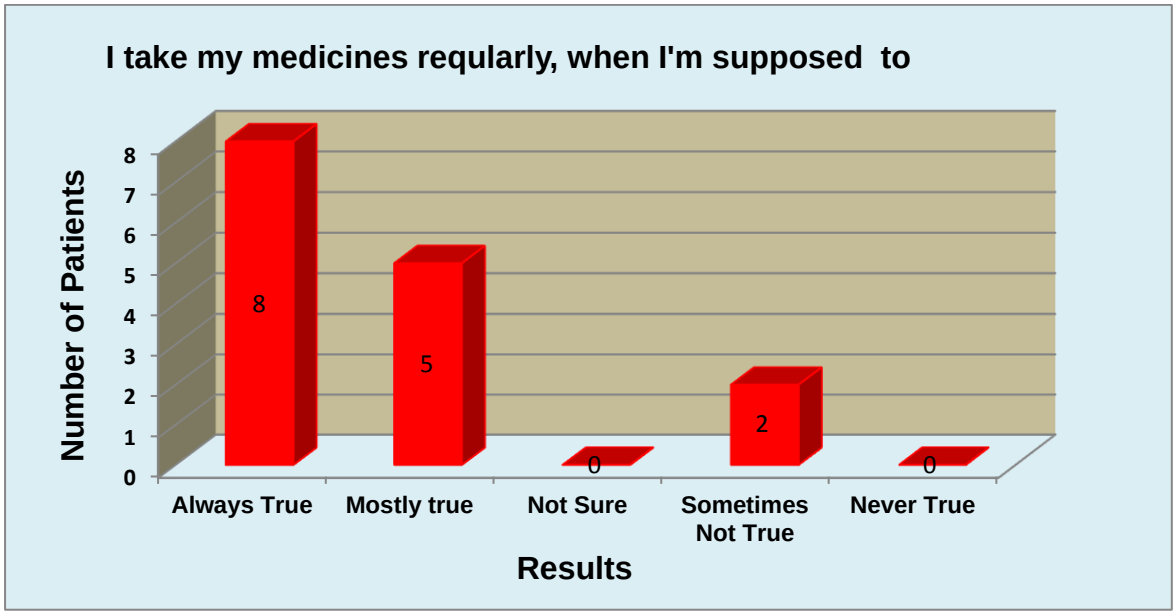

Figure Nine-Likert Scale Result Post Intervention

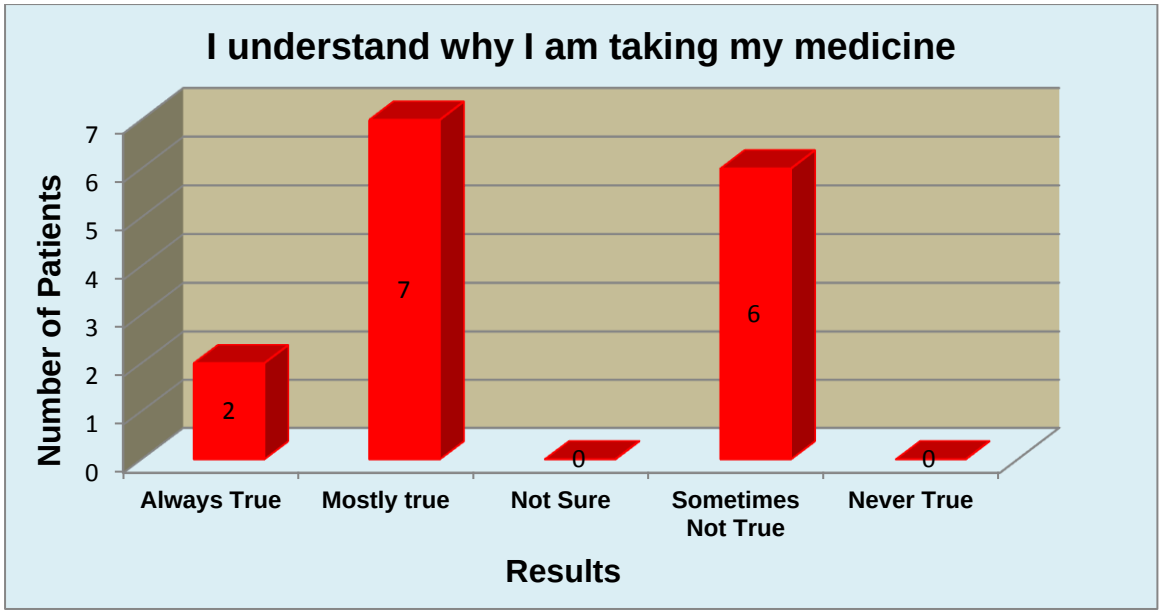

Figure Ten-Likert Scale Result Post-Intervention

4.3.4 Dissemination plan:

In terms of implementation, the qualitative evaluation revealed the ñknow your medicinesò service was successfully introduced in the four community pharmacies involved in the change project. This is further substantiated by the quantitative data that revealed an increase in patient knowledge and adherence to prescribed medication. Thus, the dissemination of this project to the entire organisation will change the current procedures in community pharmacy and influence best practice. Through this new practice, pharmacists and patients can share understanding and information about medicines and medicine use. This will thereby provide guidance and support to patients so that adherence and self- management is more probable in their everyday lives.

Dissemination Aim:

The dissemination aim is to enhance further patient and pharmacist awareness of the service which will lead to an increased contribution to patient care and medicines adherence.

Target Audiences:

To achieve this aim, the writer will firstly disseminate the data to the senior management team (SMT) within the organisation. Once their ñbuy-inò is achieved, the remainder of the target audience can be considered, in this case, pharmacists, patients and GPsô

Key messages and communication plan:

The key communication to stakeholders will include the positive impact of the project; this will be conveyed through the positive results in relation to patient adherence and patient care. The organisation currently consists of eighty- seven pharmacies; hence the dissemination of data to all pharmacies would be an immense undertaking for the writer alone. With this in mind, the writer intends to identify change champions within the organisation; this will encourage a more practical roll- out of the service and a higher likelihood of project sustainability. Various sources of communication will be employed to ensure the transfer of data is effective. The organisationsô monthly bulletin will be used as a medium to disseminate the success of the project to pharmacists and pharmaceutical technicians. This will enhance their understanding of the service and prepare them for future roll out led by a change champion in each area. A manual detailing a summary of findings and guidance in carrying out the service will also be made available.

4.4 Summary and Conclusion:

The writer used a mixed method approach to evaluate the dissemination of the ñknow your medicinesò service to four community pharmacies. The use of Kirkpatrickôs model in objective one ensured all aspects of the educational evaluation were considered. The aim of the evaluation methods employed in this chapter was to

ascertain the effectiveness of the questionnaire concerning organisational impact, patient- centred care and medicines adherence. Various qualitative and quantitative methods were included to ensure a comprehensive evaluation; this involved observation, informal interviews, and Likert scale data analysis.

This method is also described as triangulation which is defined by Robson (2002) as a means of using multiple methodologies to gain information on a chosen field. Denscombe (2010) further built on this by stating, triangulation can provide the evaluator with various perspectives on the data collection. Therefore, the accuracy, validity and reliability of data will improve.

For the most part, the writer is confident that the evaluation results reflect achievement of set objectives. Although prescription items did not increase within the time-frame of the project, medicines adherence did. The writer believes this will impact prescription item revenue in the future. The subsequent chapter, chapter five will explore the findings and suggest further recommendations.

Chapter Five: Discussion and Conclusions

5.1 Introduction

As detailed in chapter four, the overall aim of the project was successfully achieved. Through the introduction of the ñKnow your Medicinesò service, patient engagement improved, and the rate of adherence to prescribed medication increased. This chapter provides further detail on the findings from the project; the implications of the project for stakeholders and the related strengths and limitations. It also identifies areas for improvement and presents future recommendations.

5.2 Project Impact

The change had a positive influence on patient- centred care. Through increased interaction between the pharmacist and patient; patient engagement, patientsô understanding of medicines and patientsô medicines adherence improved. The change also led to the development of pharmacistsô this project encouraged those involved to apply further their clinical knowledge and counselling skills which had a positive effect on the advancement of pharmacist practice.

5.2.1 Stakeholders

- Despite initial resistance from pharmacistsô participating in the project, the initiative was succeeded and consequently created a sense of achievement amongst staff. Further detail on initial resistance is detailed in reflection one of this dissertation. The change project allowed pharmacistsô to develop their relationships with patientsôand consequently enhanced their confidence.

- The feedback from patients was especially promising as the majority found the ñknow your medicinesò service highly valuable. It provided them with an opportunity to discuss their medicines and to acquire the skills and knowledge to effectively manage their condition. An improvement in self-management skills was shown at the follow-up review. The subsequent statements capture the project impact on patient well-being;

  Patient A: *“ I feel like a new woman, I can breathe again.”*

  Patient B: *“ I have been using inhalers for years, and this is the first time I have been shown how to use them properly.”*

  Patient C: ñ*As a result of the service, I now understand why I’m taking my medicines.”*

- As part of the organisations ongoing focus to encourage repeat customers and improve the health and well-being of patients; it was decided by senior management to continue this service. Senior management has recommended that the service be fully implemented over the coming three months. It will also be provided to new asthma patientsôon an ongoing basis.
- The writer successfully implemented a new service within the organisation; this enhanced their level of confidence and also made them more aware of their managerial strengths and weaknesses. On completion of the change project the writer reflected on their behaviour throughout the change process; this is documented in the main reflection piece that accompanies this dissertation.

5.2.2 Practice

The primary aim of this change was to improve adherence to prescribed medication through improved advice and counselling. The project required a cultural change to the current practice of community pharmacists and the organisation. As discussed in chapter one, community pharmacies have been affected by considerable cuts in fees paid by the HSE through the Financial Emergency Measures in Public Interest (FEMPI) Act, 2009. This led to the shift from a margin model to a volume model that created an increase in workload and a decrease in resources. Consequently, patient engagement proved more challenging for community pharmacistsô; this change sought to improve and develop pharmacy practice through the introduction of the ñknow your medicinesò service. The aim of this change was successfully achieved through the delivery of the change process and through addressing each objective collectively. The introduction of the ñknow your medicines serviceò improved the

communication and engagement between pharmacistsôand patientsôthus reducing the rate of non-adherence and improving health outcomes.

- The service has encouraged an improvement in patient self- management through an increase in education, communication and health coaching.
- It has influenced a change in the current culture of pharmacy through changing the process in which pharmacistsôand patientsôengage; the service encouraged reflection, note-taking and improved collaboration.

Pharmacist morale was enhanced as they appreciated the opportunity to use their clinical knowledge and add variety to their role.

5.2.3 Theory

Prior to commencing the change process, the writer completed a literature review that focused primarily on patient centred care. In particular, the review focused on the rationale behind the change to NHS community pharmacy contracts in 2005, which sought to reward more patient-centred services. The review, which is detailed in chapter two of this dissertation, encouraged the execution of this project through outlining the advantages of patient -centred services and also the obstacles associated with such. The information gathered through the literature review helped to inform the writersô thinking; this was particularly significant in determining the change methodologies that are discussed in chapter three. The writer had initially considered the implementation of the service to all patients; however the evidence detailed in previous studies promoted the dissemination to one patient cohort initially. On completion of the change process, the writer analysed the correlations between the outcomes of their change project and the findings from previous papers.

Patient- Centred Care:

The principal objective of this project was to prove patient engagement has an impact on medicines adherence and the overall quality of care. The literature was essentially in favour of this hypothesis. The majority of studies reviewed found that a collaborative approach to healthcare will have a positive effect on medicines adherence and health outcomes (Gruman et al., 2010), (Coulter, 2006), (Greenall, 2006). However, this contrasts with the views held by Albekairy (2014) and Coulter and Ellins (2007) in that patient -centred service such as medicine use reviews are not feasible due to lack of patient interest and time. The results of this change project challenged those views as the writer had a 100% participation rate from patientsôand pharmacistsôinvolved in the initiative. While the writersôthinking is in favour of the literature supporting patient- centred services, it would be idealistic to make this conclusion based on their sample size and project time-frame. Moreover, the 100% participation rate could have been correlated with the relationships between the writer as the change agent and their colleagues as participating pharmacistsô Hence, further research is required in this area.

Medicines Adherence:

As presented in the previous chapter and on figure six and nine, of the fifteen patientsô participating in the change project the probability to be adherent did increase. At baseline the amount of patientsôthat answered always true to the question; ñI take my medicine regularly when Iôm supposed toò resulted in zero, this increased to eight post -intervention. Comparably, similar studies carried out by Lee

et al. (2006), and Mikkonen (2012) show the correlations between patient education and medicines adherence which led the writer to anticipate a positive outcome.

While the writer was reassured by this outcome, and the correlation with the literature. It would be impractical to disregard the difficulty of sustainability that is a common theme within similar studies referenced in chapter two (Greenall, 2006), Lee et al. (2006). It is apparent in these studies that the level of adherence did improve, but only for the duration of the trial. With this in mind, the writer has based aspects of their future recommendations to facilitate project sustainability.

5.3 Strengths of the Project

The main strength of this project was in the participants, without the collective involvement of pharmacistsô and patientsô it would not have been possible to implement the service. The writer depended on the pharmacistsô advice and expertise in community pharmacy to successfully disseminate the questionnaire to patients.

However, if the project had not been approved by senior management; staff may not have been as willing to assist in the change process. The support from senior management created a ñ*sense of urgency*ò which according to Kotter (1995) is essential to change management. Endorsement from senior management also influenced the level of power the writer had as a change agent. This was highly significant as it is power that encourages individuals to do something in a particular way; and it is also power that maintains many structures and processes (Diefenbach, Todnem By and Klarner, 2009).

Although, according to Handy (1993) *"possession of a power source does not automatically mean that you can influence someone"* p125. It was imperative to consider this during the change process as not all approaches to power lead to the desired effect. If senior management had initiated the service in a coercive manner, pharmacists might have been more likely to simply comply rather than cooperate (Handy, 1993).With this in mind, the writer decided on a more persuasive power base. Considering the organisationsô culture and the context of the change, it was more appropriate to influence participants using expert power (Bowditch and Buono, 1997).

Additionally, the New Medicines Service version provided by the NHS in the UK had already been established so provided a benchmark for reference in the design and implementation phase. Its success also provided evidence to influence the organisation and employees towards change.

5.4 Limitations

However, the writer is aware that this project was not without limitations. Patientsô adherence to medicines is particularly difficult to measure (Jose, 2011).The method used in this project was self -reported adherence. This was measured by comparing the initial ñKnow your Medicinesò questionnaire with an eight week follow- up questionnaire. As discussed in chapter four, every effort was made to ensure validity of data. However, the writer is aware that this will never be 100% possible as according to Cohen (2007) there are several areas where invalidity may still be a consequence. Despite reducing these aspects through preventing non-return of questionnaires and avoiding too long or too short between questionnaire one and questionnaire two a certain percentage of invalidity is inevitable (Cohen, Manion & Morrison, 2003).

Time was also another fundamental limitation; it was difficult to measure project sustainability within the allocated time-frame. However, as the organisation has agreed to disseminate further and develop this change, the writer is hopeful that sustainability of the service is likely.

The management style displayed by the writer is also noted as a limitation.This style of management is further discussed by the writer in the main reflection piece that accompanies this dissertation. The level of support provided to the participants during the change process would not be viable if the project were replicated on a wider scale. Hence, the leadership style displayed by the writer would be described as situational. While the writer had a vision, which according to Dubrin (2010) is a principal aspect of successful leadership; the change process was over-managed and under-led at various stages. As discussed in chapter three of this dissertation; the writer attended and assisted the pharmacistsôat each asthma clinic. While this approach was successful within the context of the project, it is believed true leadership should not just focus on the leader. Leadership should also focus on the followers, peers and supervisors within an organisation. An increase in delegation and responsibility allows for more strategic thinking and leadership effectiveness. (Avolio &Walumbwa et al., 2009, pp. 421-449).

5.5 Recommendations

Consequently, the writer recommends the need for change champions. Kotter (1995) refers to this as empowering others to act on the vision. As this will encourage employee engagement and participation, the writer will be able to replicate the change to other pharmacies using a more realistic approach.

Supervising Pharmacistsô will be empowered to take the lead in this service and disseminate to all existing asthma patientsô over a three- month period. The questionnaire will also be distributed to new asthma patientsôon an ongoing basis. Furthermore, one of the foremost recommendations for future development is to adapt the ñknow your medicinesò service so that it is more asthma-specific. The development of the questionnaire was initially designed to suit patients commencing on a new medicine or patients prescribed more than four medicines. However, it became evident during the initial pilot that this approach was too broad and, therefore, difficult to execute and evaluate. The writer has recommended a change in name to the service so that it will attract more asthma patients, ñasthma controlò has been proposed to senior management.

Additionally, the writer strongly recommends patient referral from other healthcare professionals such as GPsôand the Asthma Society of Ireland. This is a vital element for future sustainability and improved outcomes. Referral of patientsôfor this service will ensure patientsôthat require the service most will be more likely to avail of it.

Finally, the writer recommends that this service is disseminated to other conditions. The New Medicines Service (NMS) provided by the NHS to patientsôin the UK has been disseminated to four therapy areas, Asthma/COPD, Hypertension, Type Two Diabetes and Anticoagulation therapy (PSNC Main site, 2014).

5.6 Summary and Conclusion

This organisational development project included the introduction of a patient-centred service in four community pharmacies. The design and dissemination of a structured questionnaire, and the evaluation of the overall aim to improve medicines

adherence through increased patient engagement. The data collection generated from the questionnaire used at baseline and post- intervention endorsed the use of adherence questionnaires in community pharmacy. Moreover, the overall feedback from participants and senior management indicate that the change was effectively established and completed. While the ñknow your medicinesò service only concentrated on one cohort of patients, the evaluation of patient response revealed the need to roll-out to other therapy areas. The time limitations of this project did not allow the writer to fully measure the aspect of sustainability. However, the project did reveal the improvements to patient care and adherence to medication that will generally lead to improved health outcomes.

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Appendix 1

Swot Analysis of HSE change model

SWOT Analysis Template **Swot analysis of the Health Service Executive Change Model.**

Strengths	**Weaknesses**
• Comprehensive • Cyclical • Collaborative • Encourages change agent to reflect • Encourages staff engagement • Irish model • Non-linear • Focus on sustainability	• Repetitive • Unclear if you have not used it previously • Lack of clarity model diagram • Lack of associated literature
Opportunities	**Threats**
• Agile model • Opportunity to adapt the model to my project • Initiation encourages the use of tools • Continuous	• Time to complete each stage • Assumes background knowledge • Lack of associated literature

Appendix 2:

SWOT analysis of "Know your Medicines" change project.

Swot Analysis Template **SWOT Analysis of the organisational change project.**

Strengths	**Weaknesses**
• The NHS version can be used to set the standard. • Will allow the pharmacist to assess the actual use of medication and resolve ineffective use. • Will improve pharmacist/patient engagement. • Will improve adherence to prescribed medication.	• The time to complete the questionnaire may hinder the success of the project. • Conflicting projects. • The accuracy of patient answers on the questionnaire.
Opportunities	**Threats**
• Opportunity to introduce a patient-centred service. • To network with key stakeholders, GPs, Asthma Society of Ireland, Patients, Pharmacists. • To become the pharmacy of choice for asthma patients.	• Sustainability • Pharmacist/Patient Resistance • Funding for extra resources • The value patients put on adherence questionnaires.

Appendix 3: PEST Analysis

PEST Analysis of organisational change project

PEST Analysis PEST Analysis of organisational change project

Political	Economical
• Report published in 2014 by Pfizer, IPU and IPA revealed non-adherence is costing EU governments an estimated 125 billion	• Fempi Cuts • Reduced margin in pharmacy • Potential to increase organisational revenue as a result of an increase in prescription items
Social	**Technological**
• Increased demand on healthcare industry in recent years • Public perception of adherence questionnaires • Improved adherence will impact on the amount of re-admissions to hospital	• Not all patients are comfortable with the use of I.T.

Appendix 4: Stakeholder Analysis

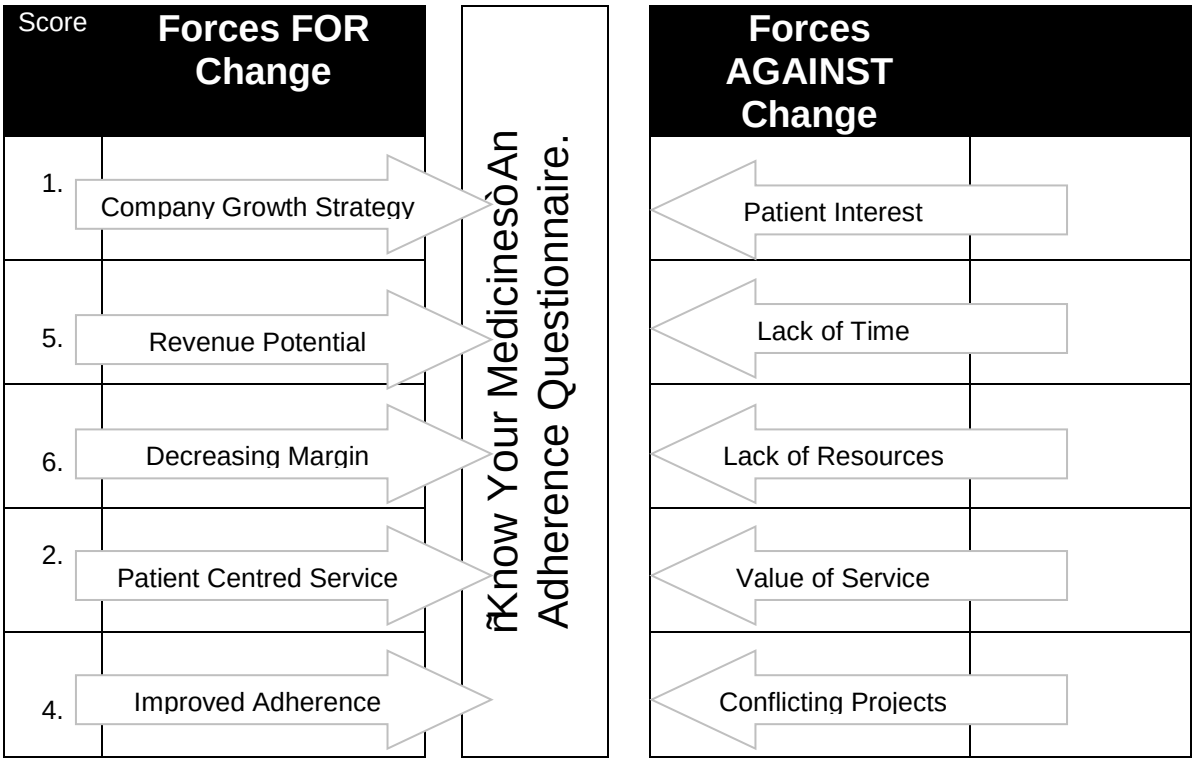
High

• Patients • Pharmacists • Senior management team	
	• Local Doctors • Asthma Society

low **Interest** **High**

Appendix 5: Force Field Analysis

Force Field Analysis



Appendix 6: Know Your Medicines window display

Appendix 7: Know your medicines Questionnaire

Know Your Medicine

This short questionnaire has been designed to help us help you.

If you're visiting us for the first time with your prescription, or if you have been prescribed a new medicine, take a moment to let us know how we might be able to help you more effectively take your medicines.

1. Your Details (So we have all the correct & necessary information on our files for you)

First Name		Surname:		Telephone:	
Address:				GP Name:	
				GP Address	
				DOB:	

2. Your Requirements (So we always know exactly what you need)

Would you like us to keep your prescription on file here in the pharmacy so you can call us when you need it?	Yes ___ NO ___		
Are you on any of the Irish Prescription Medicine Schemes? Please Circle	GMS DPS LTI HAA	Your Scheme Number :	
Have you any special instructions for us today?			
Have you any known allergies?			

3. You & Your Medicine (So we can see whether we can make things easier for you)

Please circle which response is most suitable to you	1	2	3	4	5
1. I take my medicines regularly, when I'm supposed to	Always true	Mostly true	Not Sure	Sometimes not true	Never true
2. I feel in control of my health	Always true	Mostly true	Not Sure	Sometimes not true	Never true
3. Remembering to take my medicine is easy for me	Always true	Mostly true	Not Sure	Sometimes not true	Never true
4. I don't experience any side-effects of taking my medicine	Always true	Mostly true	Not Sure	Sometimes not true	Never true
5. I understand why I am taking my medicines	Always true	Mostly true	Not Sure	Sometimes not true	Never true
6. I know everything I need to about my condition	Always true	Mostly true	Not Sure	Sometimes not true	Never true
7. I am never upset or worried about my condition	Always true	Mostly true	Not Sure	Sometimes not true	Never true
8. It is very easy for me to take my medicines	Always true	Mostly true	Not Sure	Sometimes not true	Never true
9. I would never deliberately skip one of my doses	Always true	Mostly true	Not Sure	Sometimes not true	Never true

☐ Please tick to confirm you are happy for a member of our Pharmacy Team to speak to you about how we might be able to help you Know and Take your Medicines Better

☐ Please tick to confirm you are you happy for us to keep these details on file with your other information

☐ Please tick that you are happy for us to use anonymous data associated with this service for analyse by ourselves or other health professionals

Patient Signature: _____ Date: _____

Appendix 8: Review Questionnaire

Know Your Medicine Review

We want to know how you have been feeling!

Please take a few moments to complete this questionnaire so we can ensure we're providing you with the best care possible.

Patient Address Sticker here

1. You & Your Medicine (So we can see whether there's anything else we can do to help you)

Please circle which response is most suitable to you	1	2	3	4	5
1. I take my medicines regularly, when I'm supposed to	Always true	Mostly true	Not Sure	Sometimes not true	Never true
2. I feel in control of my health	Always true	Mostly true	Not Sure	Sometimes not true	Never true
3. Remembering to take my medicine is easy for me	Always true	Mostly true	Not Sure	Sometimes not true	Never true
4. I don't experience any side-effects of taking my medicine	Always true	Mostly true	Not Sure	Sometimes not true	Never true
5. I understand why I am taking my medicines	Always true	Mostly true	Not Sure	Sometimes not true	Never true
6. I know everything I need to about my condition	Always true	Mostly true	Not Sure	Sometimes not true	Never true
7. I am never upset or worried about my condition	Always true	Mostly true	Not Sure	Sometimes not true	Never true
8. It is very easy for me to take my medicines	Always true	Mostly true	Not Sure	Sometimes not true	Never true
9. I would never deliberately skip one of my doses	Always true	Mostly true	Not Sure	Sometimes not true	Never true

2. How have you been doing? (So we can make sure we're doing all we can for you)

How have you been feeling since you last completed this form?	
How have you been getting on with your medicines?	
Have you noticed an improvement in your health?	
Do you have concerns about your health or your medicines?	
Do you feel your medicines are working?	
Have you missed any doses of your medicine since you've been here last?	
Is there anything you'd like to know about your medicines or your health?	

☐ Please tick to confirm you are happy for a member of our Pharmacy Team to speak to you about how we might be able to help you Know and Take your Medicines Better

☐ Please tick to confirm you are you happy for us to keep these details on file with your other information

☐ Please tick that you are happy for us to use anonymous data associated with this service for analyse by ourselves or other health professionals

Patient Signature: _____ Date: _____

Appendix 9: Patient Tracker

Patient Name	Start Date	KYM	Outcome	Review Date	Outcome	Returned for repeat	Returned for repeat

Appendix 10: Poster

RCSI INSTITUTE OF LEADERSHIP

Know Your Medicines

The Implementation Of A Patient Centred Service In Community Pharmacy

RCSI DEVELOPING HEALTHCARE LEADERS WHO MAKE A DIFFERENCE WORLDWIDE

Introduction

30-50% of prescribed medication for long-term illness is not used correctly[1]

This leads to;

- Increased hospital admissions
- Increased cost of care to the HSE
- Premature mortality
- Reduced health related quality of life

This project revealed that a pharmacist-led intervention could significantly improve the rate of non-adherence to prescribed medicine.

The initiative was implemented in four community pharmacies across Dublin and Limerick.

Aims & Objectives

Aim:

To improve low adherence to prescribed medication through improved advice and counselling. This will be achieved through the introduction of a patient-centred service; the service will allow the pharmacist to ascertain actual use of medication and resolve ineffective use.

Objectives:

To enhance treatment outcomes and ensure the patient has been given the appropriate information on the use of their medicines.

To improve the rate of non-adherence through changing the process in which pharmacists' engage with patients'.

To roll out the service as a pilot project in four community pharmacies.

Methodology

The HSE model was chosen for its agile and comprehensive approach to change. It was user friendly and offered the change agent clarity and guidance throughout the process.

Figure 1: HSE Change Model [2]

Initiation

Performed various analytical tools. SWOT, Force Field Analysis, Stakeholder Analysis.

Identified areas for action

Introduced "know your medicines" to stakeholders at the company pharmacist forum.

Planning

"Know Your Medicines" questionnaire designed

Pilot schedule devised and communicated to participants

Implementation plan finalised

Implementation

"Know your Medicines" service rolled out to four community pharmacies in January 2015.

Mainstreaming

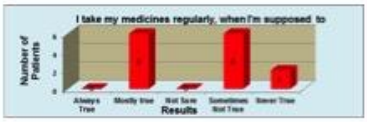
Ongoing support to participants' through regular communication and engagement.

Evaluation through Likert scale analysis, observation and informal interviews.

Evaluation

- New process successfully implemented in four community pharmacies
- Medicines adherence significantly improved
- Patient understanding of their medicines improved

Before



After

Organisational Impact

1. The service enhanced the patient journey and increased direct patient care.
2. Medicines adherence improved
3. The professional role of the pharmacist was developed
4. The service will be further disseminated to the entire organisation in 2015

Conclusion

The change was carried through the application of the HSE change model. The project was a success as the main aim to improve adherence to medication was achieved.

References

1. Sabate E, *Adherence to Long-Term Therapies: Evidence for Action*. Geneva, Switzerland: World Health Organisation;2003.

2. HSE (2008) *Improving our services: a user's guide to managing change in the Health Service Executive*. Dublin: HSE.