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Academic Health Science Partnership in Tayside

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Students and early career professionals as change agents

PETER DAVEY, VICKI TULLY , DIANE CAMPBELL, JOHN COLVIN, JENNA BRECKENRIDGE,

AHSP
Academic Health Science Partnership in Tayside

Background

"Healthcare will not realise its full potential unless change making becomes an intrinsic part of everyone's job, every day, in all parts of the system"

Paul Batalden

Early Career Professionals (ECPs) are in their first 5 years post graduation or at the beginning of a change of career (e.g. into Management)

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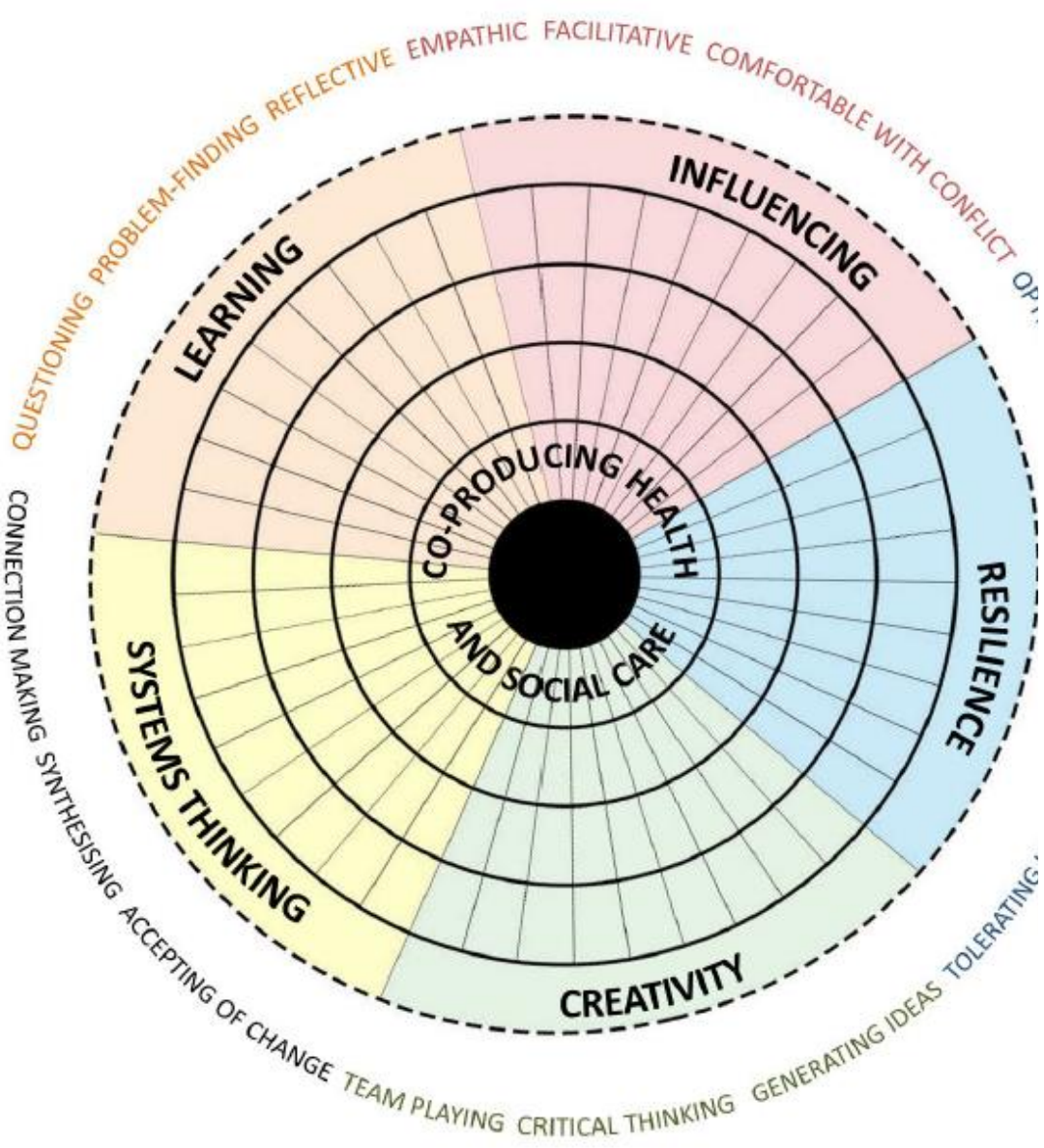
Aims: What Is A Change Agent?



Lauren Resnick 1999

Intelligence: figuring things out and finding a workable solution

«One's intelligence is the sum of one's habits of mind»

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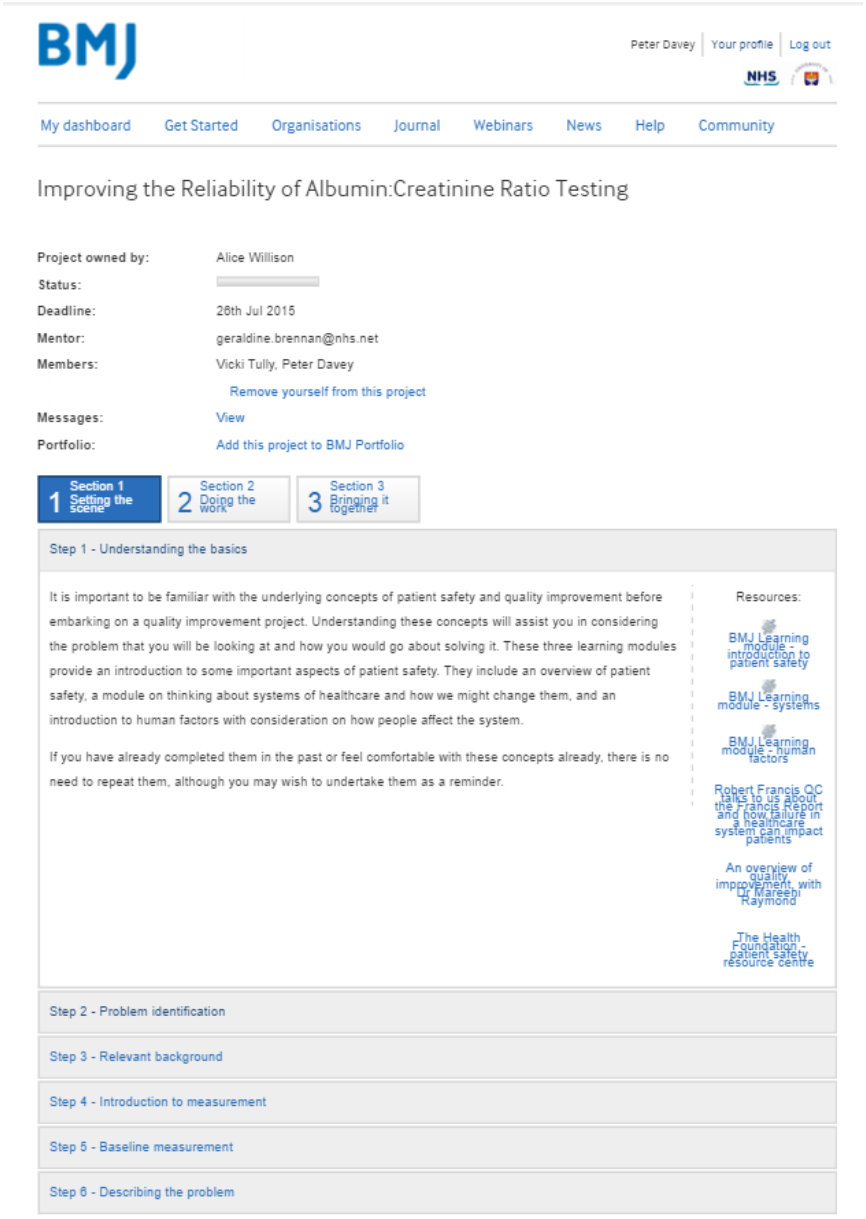
Methods



BMJ

Peter Davey | Your profile | Log out

NHS

My dashboard | Get Started | Organisations | Journal | Webinars | News | Help | Community

Improving the Reliability of Albumin:Creatinine Ratio Testing

Project owned by: Alice Willison
Status:
Deadline: 26th Jul 2015
Mentor: geraldine.brennan@nhs.net
Members: Vicki Tully, Peter Davey
Remove yourself from this project
Messages: View
Portfolio: Add this project to BMJ Portfolio

1 Section 1 Setting the scene | 2 Section 2 Doing the work | 3 Section 3 Bringing it together

Step 1 - Understanding the basics

It is important to be familiar with the underlying concepts of patient safety and quality improvement before embarking on a quality improvement project. Understanding these concepts will assist you in considering the problem that you will be looking at and how you would go about solving it. These three learning modules provide an introduction to some important aspects of patient safety. They include an overview of patient safety, a module on thinking about systems of healthcare and how we might change them, and an introduction to human factors with consideration on how people affect the system.

If you have already completed them in the past or feel comfortable with these concepts already, there is no need to repeat them, although you may wish to undertake them as a reminder.

Resources:

BMJ Learning module - introduction to patient safety

BMJ Learning module - systems

BMJ Learning module - human factors

Robert Francis QC talks to us about the Francis Report and how failure in a healthcare system can impact patients

An overview of quality improvement, with Dr Mareeni Raymond

The Health Foundation - patient safety resource centre

Step 2 - Problem identification

Step 3 - Relevant background

Step 4 - Introduction to measurement

Step 5 - Baseline measurement

Step 6 - Describing the problem

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BMJ Quality Improvement Reports

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Testing

BMJ Quality Improvement Reports 2014; u205217.w2159 doi: 10.1136/bmjquality.u205217.w2159

Improving Mental Status Questionnaire (MSQ) completion on admission to the Acute Surgical Receiving Unit (ASRU), Ninewells Hospital, Dundee

Sylvia Okwemba, Lauren Copeland
NHS Tayside

Abstract

Delirium is common yet poorly identified in the UK. Early recognition is a key prognostic factor; delay here being associated with: increased mortality, increased morbidity, prolonged hospital stay, long term disability, and increased risk of developing dementia. Improvement in the diagnosis and management of delirium has scope to improve patient care, clinical outcomes, and ultimately an improved patient experience. As patients aged ≥75 years are at an increased risk of developing delirium, we focused the improvement project to this age group.

The baseline data demonstrated that the average ≥75 year-old patient admitted to the Acute Surgical Receiving Unit (ASRU) at Ninewells Hospital had 5.4 out of 12 predisposing and precipitating risk factors for delirium; thus there was great potential for delirium to develop in these patients. During the analysis of the baseline data it became clear that we could not go ahead and implement the initial proposed improvement as the completion of the mental status questionnaire (MSQ) was inconsistent and low at 14.99%. Completion of the MSQ is vital in establishing any cognitive deficit at admission, and for providing a baseline for the continuing admission. As a consequence of this, we had to shift the main aim of the improvement project from improving the identification, diagnosis, and management of delirium, to improving the completion rate of the MSQ in our target age group.

Consultations with members of the admission team were held to determine ways of improving the MSQ completion rate. It became clear that the completion of the MSQ relied on clinical staff remembering all 10 questions that constitute the test. The main intervention to facilitate improvement involved affixing a sticker with all 10 questions of the MSQ within the admissions document. The main aim was to increase the percentage of cognitive screening by the Mental State Questionnaire (MSQ) to 95% in patients aged ≥75 on admission to ASRU at Ninewells Hospital by 11th July 2013.

We achieved our main aim with 100% compliance on two days. Our average compliance over six days was however 81.33%, whilst not reaching our target this is still a substantial improvement. The introduction of the sticker detailing the 10 MSQ questions within the ASRU admissions document was well received by the admissions team. It has simplified the process as members of staff do not need to rely on their memory to remember the questions, and the sticker also acts as a prompt for them to consider further cognitive screening.

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BMJ Quality Improvement Reports 2015; u206598.w2653 doi: 10.1136/bmjquality.u206598.w2653

Improving early recognition of delirium using SQiD (Single Question to identify Delirium): a hospital based quality improvement project

Elaine McCleary, Pamela Cumming
School of Nursing & Midwifery, University of Dundee

Abstract

Delirium is a serious condition associated with poor outcomes which can be prevented and treated if recognised early. Older people and people with dementia or severe illness are more at risk of delirium. SQiD is a simple prompt question which asks, "Is this patient more confused than before?" Focusing specifically on patients aged 75 and over, this project aimed to increase awareness and usage of SQiD to help improve early recognition of delirium, in accordance with the Healthcare Improvement Scotland national initiative. This project was carried out by two student nurses during an eight week clinical placement in the acute surgical receiving unit (ASRU) of Ninewells Hospital, Dundee, Scotland.

Qualitative and quantitative methodology was used to establish baseline data which revealed that only 35% of the multidisciplinary team (MDT) were aware of SQiD, with only 15% using SQiD. Initial activities involved raising awareness of SQiD by means of information cards and posters. Once awareness was raised, the usage of the SQiD question by nurses was tested. Finally, the SQiD question was incorporated into the nursing care round forms and usage recorded. Following these awareness raising activities we noted an increase of 83% awareness and 20% use of SQiD. Incorporating the SQiD question into the hourly care round forms increased awareness to 100% and usage to 50%.

Although this small scale project could be viewed as a success, the requirements for sustainability depend upon further implementation and spreading of the change. Sustained improvement is also dependent upon the implementation of the care rounds.

As nursing students, undertaking this improvement project has provided valuable lessons in both quality improvement science and personal learning. The improved knowledge and understanding of effective communication and the intricacies of team working is transferrable and can be applied to future nursing practice.

Step 3 - Relevant background

Step 4 - Introduction to measurement

Step 5 - Baseline measurement

Step 6 - Describing the problem

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BMJ Quality Improvement Reports 2014; u205219.w2164 doi: 10.1136/bmjquality.u205219.w2164

Improving the recognition of post-operative acute kidney injury

Nicola Trotter, Cal Doherty, Vicki Tully, Peter Davey, Samira Bell
NHS Tayside, Scotland

Abstract

The National Institute for Health and Care Excellence (NICE) state that acute kidney injury (AKI) is seen in 13-18% of all people being admitted to hospital and that other patients will further go on to develop AKI during their time in hospital, with around 30-40% being in the operative setting. AKI has an estimated inpatient mortality of 20-30% in the UK and can lead to long-term morbidities like chronic kidney disease.[2]

AKI is under-recognised and badly managed despite its prevalence and seriousness, with NCEPOD report stating that only 50% of patients with AKI received good care, that there was poor assessment of risk factors for AKI, and there was an unacceptable delay in recognising post-admission AKI in 43% of patients.[4]

Baseline data collected on the urology ward in Ninewells Hospital, showed that only five of 22 (23%) patients undergoing urological surgery had post-operative creatinine measured on the ward within 48 hours (the primary method for detecting AKI). Excluding patients who were discharged the same day 5/16 (31%) received the blood test.

The aim of the project was to increase the number of patients returning to ward 9 post-surgery who receive a serum creatinine measurement within two days of their urological surgery, excluding daycases. Specifically, we wanted the reliability of this measurement to be 95% or over in ward 9 by 30 July 2014.

This was to be done by raising awareness around AKI on ward 9 and changing protocol so that every patient staying on ward 9 beyond their day of surgery should receive a post-operative creatinine. This would be tested for a set amount of time to see if patients with AKI were being missed.

Despite not being able to implement a set protocol, the percentage of patients receiving post-operative creatinine measurements on ward 9 after a urological surgery still increased significantly. By interacting with the urology team and presenting our data, the knowledge and comprehension of the problem was altered. This lead to a change in culture and a significant increase in the number of post-operative

(professional) **Learning in practice**

'Acquire and transfer' model of learning

Professor Tara Fenwick
University of Stirling

Professional learning in practice as . . .

Attuning to minor fluctuations & surprises – reading ahead

Adapting and reorienting to what is emerging

Noticing one's own and others' effects on the collective action

Improvising amidst uncertainty

Interrupting problematic blackboxes of practice

Recognising (and using) emerging possibilities for positive action – with others

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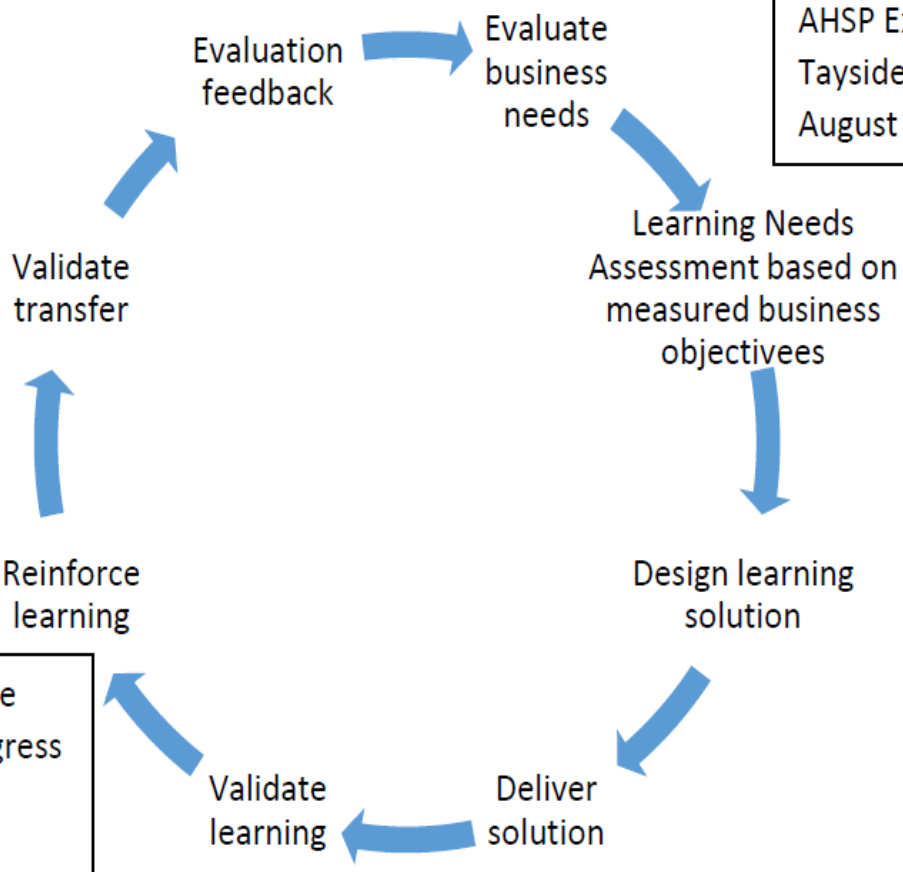
The Evaluation Cycle

The learning cycle begins and ends with evaluation



Needs and objectives agreed with AHSP Executive and presented to NHS Tayside Senior Leadership Team, August 2015

AHSP Executive and NHS Tayside LMT comment on 6 month progress report
November 2015

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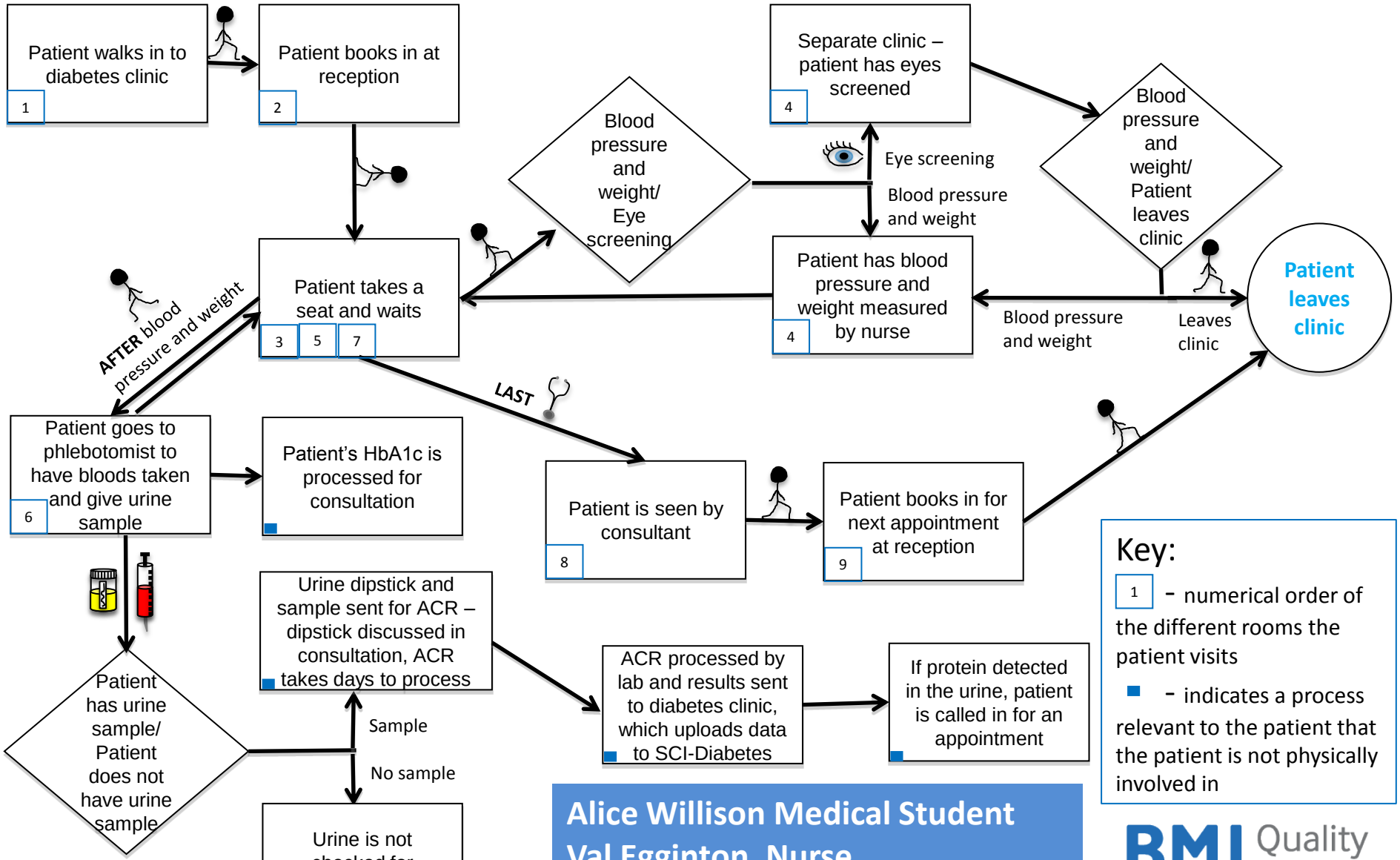
Return on Investment Level 5

NEEDS	OBJECTIVES	MEASURES (data sources)
Value exceeds costs	The value of improvement will be calculated from the cost of unreliable care multiplied by the estimated number of relevant patients or procedures per year in NHS Tayside	BMJ Quality savings and cost calculator.
	Cost of training in QI will be calculated from the SISCC evaluation of the cost to clinical and social care teams from hosting projects	

Results:
Process Flow – Patient attending diabetes clinic



Alice Willison Medical Student
Val Egginton, Nurse
Sharon Graham, Lab Technician

Key:

1 - numerical order of the different rooms the patient visits

■ - indicates a process relevant to the patient that the patient is not physically involved in

BMJ Quality

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BMJ Quality Money Matters

"Although the main aim of quality improvement is to improve care for patients, often doing things differently in a way which might be more efficient and effective can generate financial savings as well. "

"Most healthcare systems are under significant financial pressure, so being able to demonstrate that your intervention delivers financial savings shows that your intervention adds value to an organisation in multiple ways."

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Reducing Waste & Harm in the Dental Hospital

Louise Campbell, Aisling Barton, Rachael Boyle
4th Year Dental Students

THE PROBLEM

CROSS CONTAMINATION
COST
TIME
PATIENT EXPERIENCE

MONEY MATTERS

- Cost of sterilisation of an examination kit = £5.50
- On the basis of 100 examination kits used per 2 weeks:
- Before intervention (27%) = £698.50
- After intervention (7%) = £588.50
- Savings = £110 per 2 weeks
- ~£2860 per year!

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Kirsty & Jane's Story

"We could see what great changes we had made to the lives of the patients around us. "

"As a student you don't usually get to do this."

"It was invaluable experience in communication and leadership"

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Limits and Bottom Line

Rethink Professional Education in Healthcare

- Systems thinking from the start
- Learn in practice
- Learn in teams
- Be disruptive

✓Culture change:

➢Open, learning culture

➢See an abundance of opportunity

✓Unlock the potential in students and ECPs