



**Annual General Meeting
September 29, 2015**

Institute for Healthcare Improvement

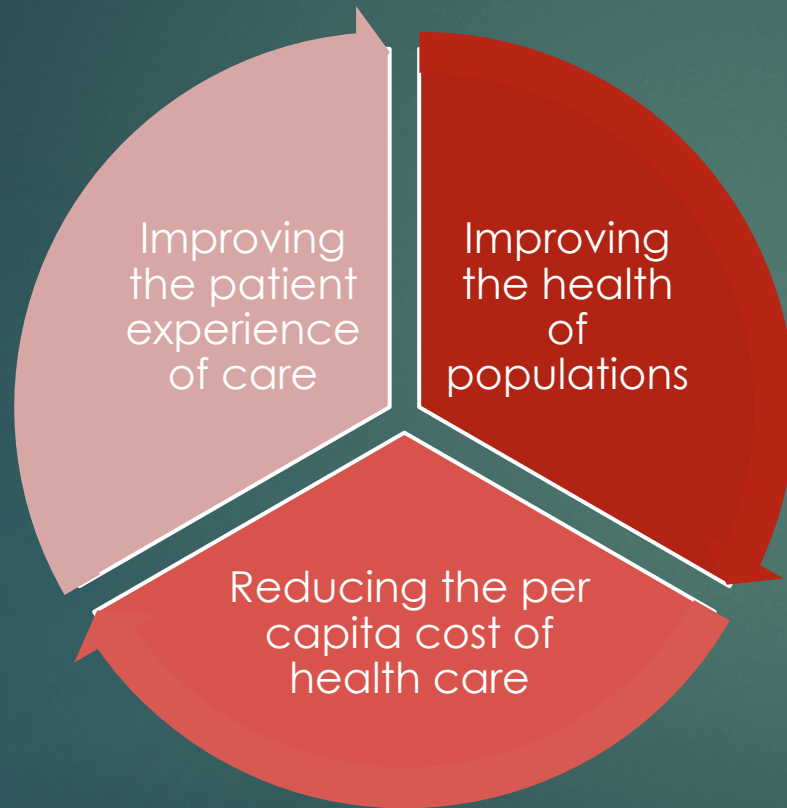
Open School: UBC Chapter

Annual General Meeting

September 29, 2015



Our Mission & Values



“Improve health and health care worldwide”

Boundarilessness and One Team

Systems Direct Our Mission

People Matter

Inclusiveness and Diversity

Honesty and Transparency

Vision and Agility

Celebration and Thankfulness

How do we achieve our *audacious* goal?

- ▶ Focus on the science of improvement and plant the seeds of innovation
- ▶ Provide free online resources for students
 - ▶ 30+ online courses, dozens of case studies, instructional videos, blogs, conferences etc.
- ▶ **Establish a Global Community**

IHI Open School at a Glance

248,700 students and residents have registered on IHI.org

238,368 students and residents have completed an IHI Open School online course

48,596 students and residents have earned the Basic Certificate of Completion

741 Chapters have been started in **72** countries

Updated 8/1/2015



IHI UBC OS Chapter

HUMBLE BEGINNINGS

HOW WE GOT STARTED

IHI Open School UBC Chapter



2012



3 graduate students brought together by IHI and a **shared interest** in improving healthcare



Support from **Faculty Advisor & UBC**



Developed a **mission statement**



Expanding Reach through regular networking speaker events



Created a **social media** presence



2013

Found the support of **BCPSQC**

Creating Opportunities



2014

BCPSQC Scholarship
empowering students



QuIP Workshops
interactive Open School courses



2015

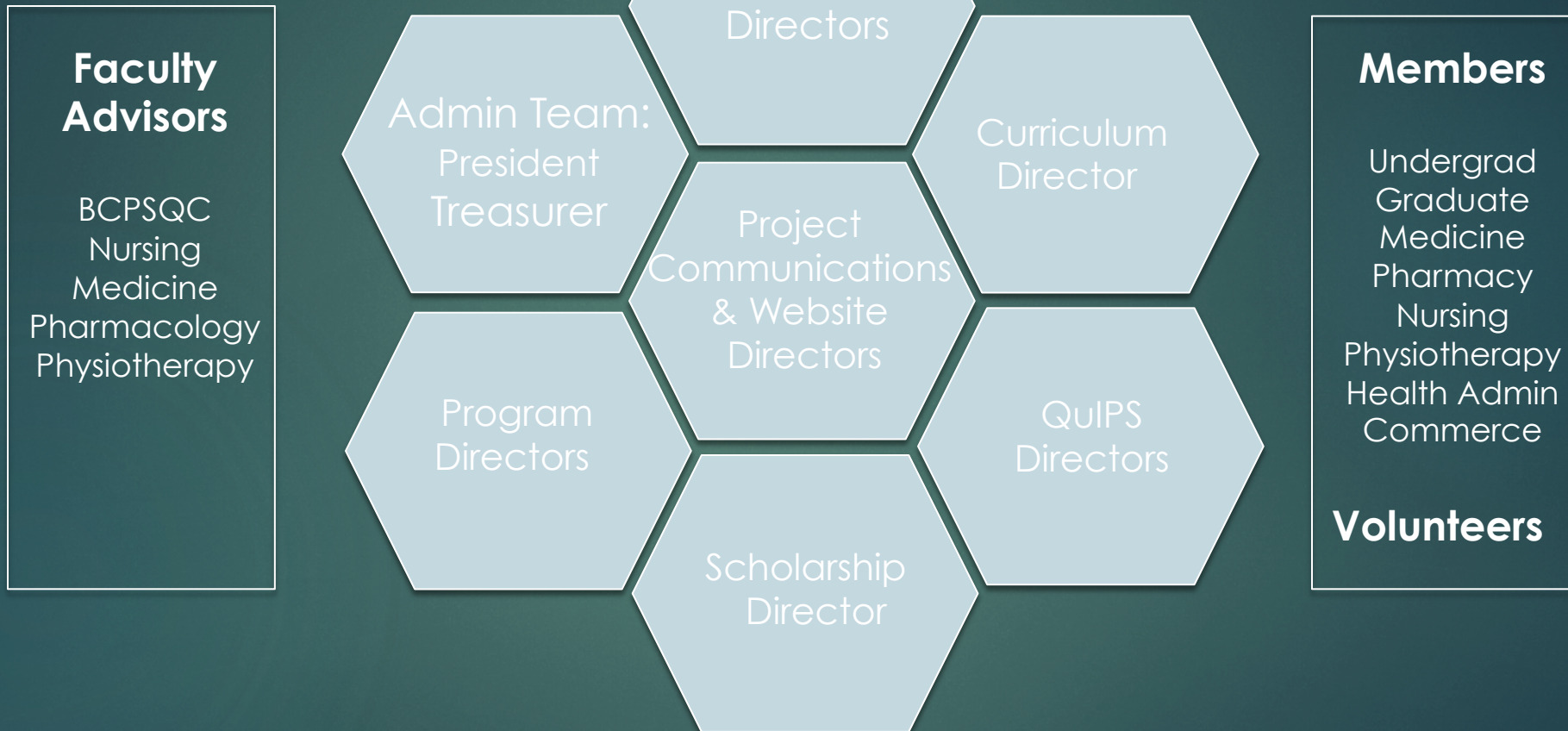
Practicum
inter professional student teams working with healthcare partners to improve care



2014 - 2015 Accomplishments

- ▶ 7 Lunch hour Workshops on the basics of Patient Safety
- ▶ Panel Discussion: How the EMR Can Enhance Patient Safety
- ▶ Student Representation at Recruitment Events
 - ▶ UBC and Medical Undergraduate Society Club Days
 - ▶ Vancouver Quality Forum
 - ▶ West Coast Regional Conference – Portland, OR
 - ▶ IHI National Forum – Orlando, FL
- ▶ 12 Students Completed Practicum Experiences
- ▶ 8 Student Scholarships totaling \$4000
 - ▶ 2 attendees at International Conferences
 - ▶ 6 attendees at the Quality Forum
- ▶ Speaker Series Event: Therapeutics Initiative

Chapter Structure 2015



Executive Team:

Science, Medicine, Pharmacy, Health
Administration, Business Administration, Kinesiology

Why Does QI Matter To You?

WATCH THE VIDEO



HI! I'M DR. MIKE EVANS
and TODAY'S TALK is on
**QUALITY
IMPROVEMENT**
OR... **QI**
in Healthcare



0:00



Quality is everyone's
responsibility

W. EDWARDS DEMING

Unless someone like you cares
a whole awful lot.



It's not going to
get better.

It's not.

How quality improvement is impacting clinical practice on a daily basis

Martin Dawes

UBC

Professor & Head Family Practice

QI Approaches

- This is not new
- Technology & Human
- We screen more, we treat more, and we live longer.
- This is not necessarily a causal relationship
- QI means knowing what the “Q” means

1984 How good a health professional?

- Principles of family medicine
- Personal physician
- Responsible for
 - Prevention
 - Screening
 - Diagnosis
 - Therapy

Prevention

- Primary
 - Smoking – brief advice
 - Nutrition
 - Exercise
- Secondary
 - Diabetes
 - Cardiovascular
 - Asthma
 - Epilepsy

1984 - I do all that

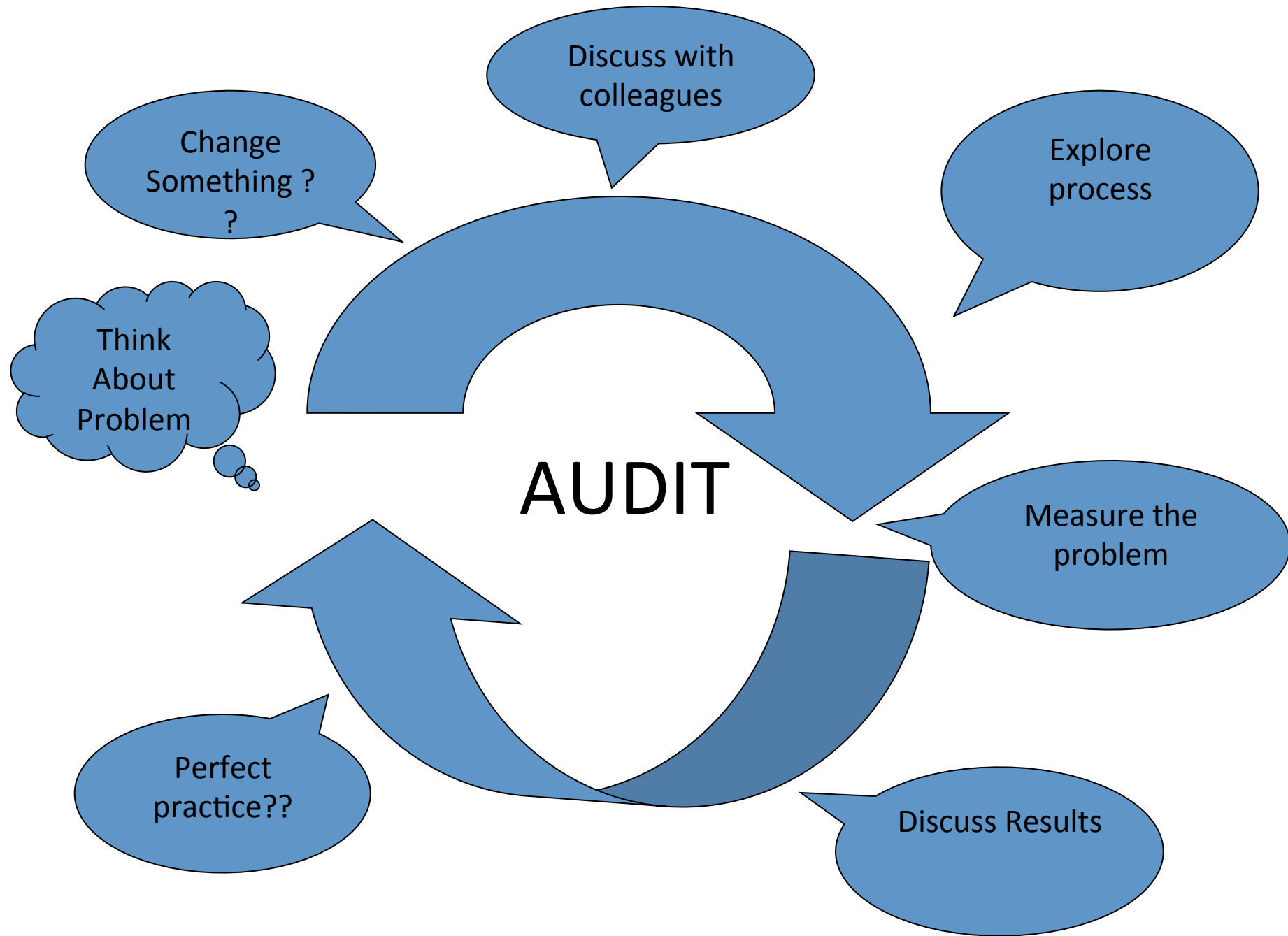
- UK
- 7000 patients
- Godfrey Fowler & Elaine Fullard – audit for BP
- All patients between 40 and 65
- Numbers of notes with a BP recorded ~35%
- Number of those with BP that was high who were on treatment ~50%
- Number of those on treatment who had a BP below 140/90 ~20%

Ooops

- None of us expected the result
- We found it hard to believe
- We questioned the nurses ability to read our writing
- We knew we were doing better than that

Action

- Employed a practice nurse
- Started tagging records for BP and diabetes
- Developed a hypertension co-operation card.

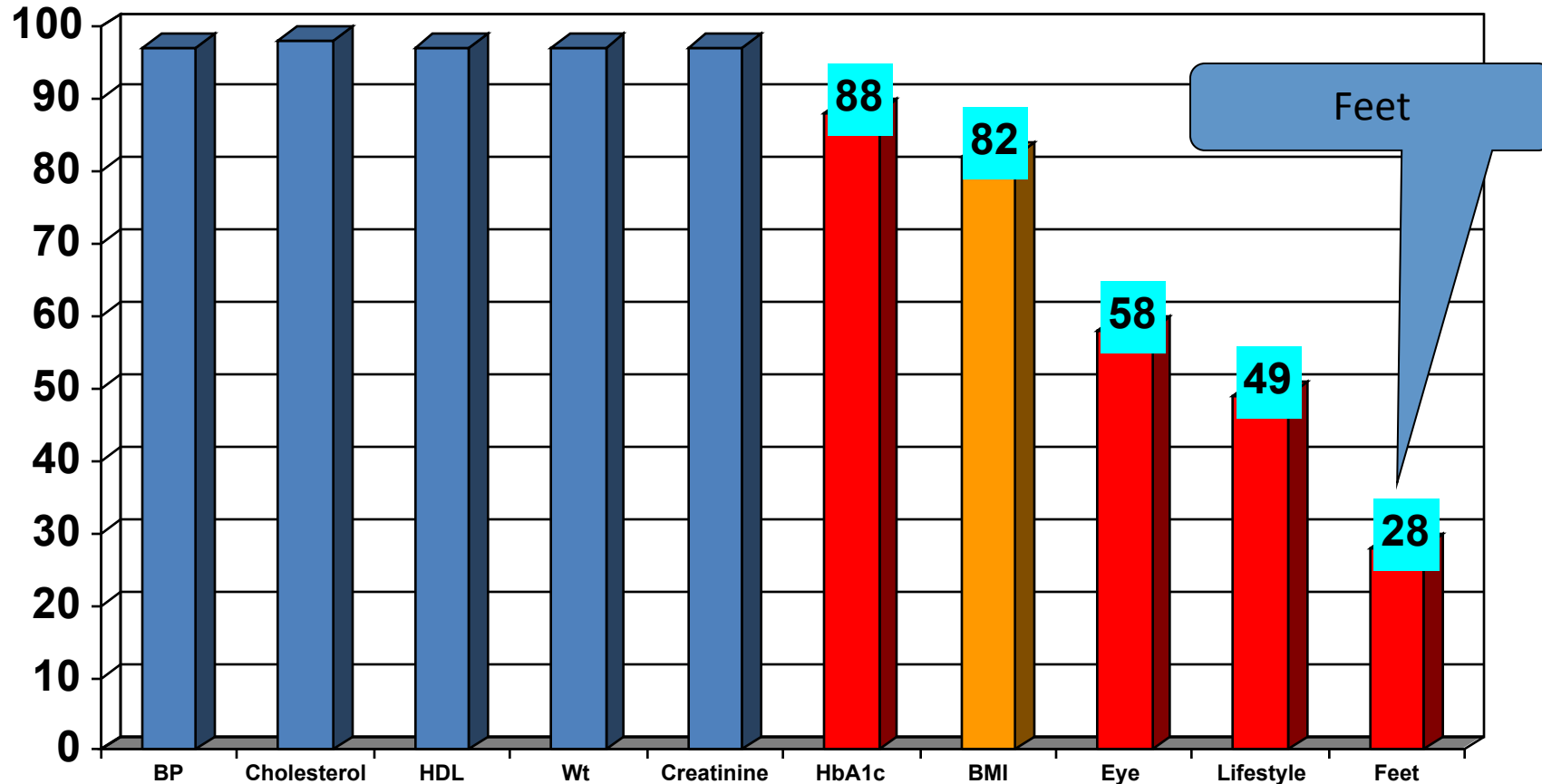


Electronic Medical records

- 1982 150
- 1987 942 (10%)
- 1993 79%
- 1996 96%
- 1998 38 practices out of 46 gave computerised data for comparative QI



Frequency (%) of Recording of Disease Progression Markers in 67 Diabetics seen at the a Primary Care Clinic



Diabetic Audit n=53

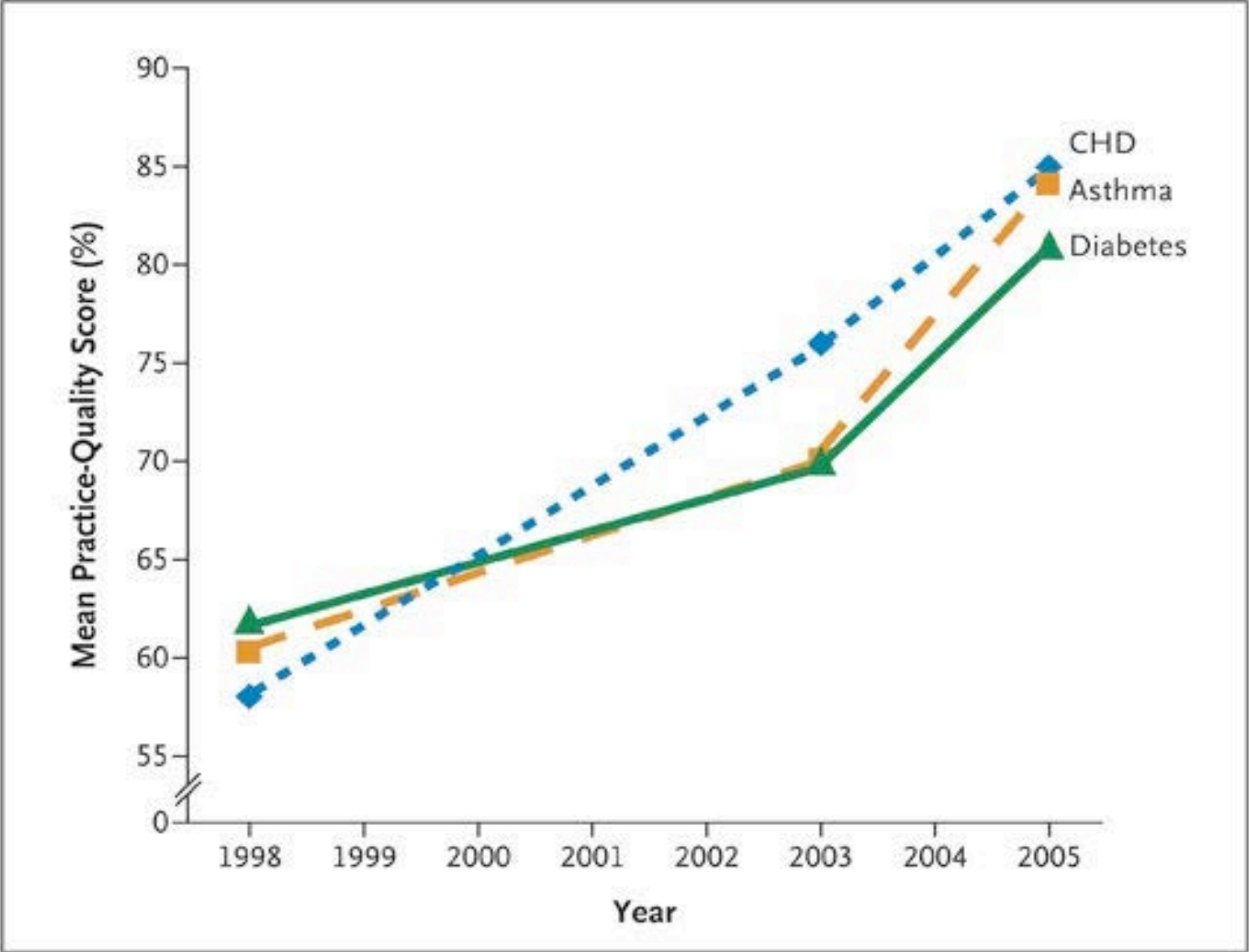
	2003	2004
• Hba1c in last 12/12	81 %	88%
• Hba1c<7	37	34
• BP	96	96
• Lipids measured	89	98
• Eye exam recorded	25	58
• Foot assessment	10	28
• Smoking status	2	23

Adverse Drug Events (USA)

- **Over 2 MILLION serious ADRs yearly**
- **100,000 DEATHS yearly – one every five minutes**
- **Ambulatory patients ADR rate—unknown**
- **Nursing home patients ADR rate— 350,000 yearly**

Is it working?

- In 1998 on average 60.5% of the coronary heart disease indicators that applied to the individual patient were met.
- By 2003 this figure had increased to 78.2%. This represents 45% of the maximum possible improvement on the 1998 figure.



The NHS Information Centre: QOF 2007/08 online results database: Search - Mozilla Firefox

http://www.qof.ic.nhs.uk/search.asp

montreal bus timetable

Most Visited Facebook Google Sites Google Scholar OpenEpi CLASP RAMQ edit web site CHEWS mcgill-fammedstudies... ITPCRG Equator OSCAR Canada BMJ QEMG BBC

Valuing General Practice The NHS Information Centre: QOF...

CLINICAL INDICATOR GROUPS: THE 4 EPILEPSY INDICATORS: UNDERLYING ACHIEVEMENT

Communication between the cells in the brain does not work properly, with too many messages being sent at once which can cause a seizure. In the QOF epilepsy management is in respect of patients aged 18 and over.

The practice can produce a register of patients aged 18 years and over receiving drug treatment for epilepsy ✓

Percentage of patients from register	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
The percentage of patients aged 18 years and over on drug treatment for epilepsy who have a record of seizure frequency in the previous 15 months	98.2%									
The percentage of patients aged 18 years and over on drug treatment for epilepsy who have a record of medication review involving the patient or carer in the previous 15 months	98.3%									
The percentage of patients aged 18 years and over on drug treatment for epilepsy who have been seizure free for the last 12 months recorded in the previous 15 months	73.5%									

CLINICAL PREVALENCE:

Percentage of practice list size	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Epilepsy	0.75%									

Detail page for 1 : DR M FLEMINGER AND PARTNERS of 1

Organisational

Patient Experienc

Additional Servic

Holistic Care

Prevalence:

Clinical Prevalen

Show comparison

2006/07 QOF re:

2007/08 PCT Av

2007/08 Englan

Practice loca

QOF 2005/0

Search for this pr
archived QOF 200
results site

Done zotero

Prevalence of polypharmacy in a Scottish primary care population

R. A. Payne · A. J. Avery · M. Duerden · C. L. Saunders · C. R. Simpson · G. A. Abel

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© Springer-Verlag Berlin Heidelberg 2014

Abstract

Purpose Polypharmacy—the use of multiple medications by a single patient—is an important issue associated with various adverse clinical outcomes and rising costs. It is also a topic rarely addressed by clinical guidelines. We used routine Scottish health records to address the lack of data on the prevalence of polypharmacy in the broader, adult primary care population, particularly in relation to long-term conditions.

Methods We conducted a cross-sectional analysis of adult electronic primary healthcare records and used linear regression models to examine the association between the number of medicines prescribed regularly and both multimorbidity and specific clinical conditions, adjusting for age, gender and socioeconomic deprivation.

Results Overall, 16.9 % of the adults assessed were receiving four to nine medications, and 4.6 % were receiving ten or

respectively, in those aged ≥50 years), but relatively unaffected by gender or deprivation. Of those patients with two clinical conditions, 20.8 % were receiving four to nine medications, and 1.1 % were receiving ten or more medications; in those patients with six or more comorbidities, these values were 47.7 and 41.7 %, respectively. The number of medications varied considerably between clinical conditions, with cardiovascular conditions associated with the greatest number of additional medications. The association of additional medications was less with Conclusion: Polypharm The main factor associated with considerable variations. The impact of clinical conditions is generally concordant conditions.

Cahr et al. *BMC Family Practice* 2014, **15**:59
<http://www.biomedcentral.com/1471-2296/15/59>

RESEARCH ARTICLE



Prescriber variation in potentially inappropriate prescribing in older populations in Ireland

Catrina Cahr^{1*}, Tom Fahey², Conor Tejlcar³ and Kathleen Bennett⁴

Abstract

Background: Health care policy-makers look for prescribing indicators at the population level to evaluate the performance of prescribers, improve quality and control drug costs. The aim of this research was to: (i) estimate the level of variation in potentially inappropriate prescribing (PIP) across prescribers in the national Irish older population using the STOPP criteria; (ii) estimate how reliably the criteria could distinguish between prescribers in terms of their proportion of PIP and; (iii) examine how PIP varies between prescribers and by patient and prescriber characteristics in a multilevel regression model.

Methods: 1,938 general practitioners (GPs) with 338,375 registered patients' ≥70 years were extracted from the Health Service Executive Primary Care Reimbursement Service (HSE-PCRS) pharmacy claims database. HSE-PCRS prescriptions are WHO ATC coded. Demographic data for claimants' and prescribers' are available. Thirty STOPP indicators were applied to prescription claims in 2007. Multilevel logistic regression examined how PIP varied between prescribers and by individual patient and prescriber level variables.

Results: The unadjusted variation in PIP between prescribers was considerable (median 35%, IQR 30-40%). The STOPP criteria were reliable measures of PIP (average >0.8 reliability). The multilevel regression models found that only the patient level variable, number of different repeat drug classes was strongly associated with PIP (>2 drugs v none; adjusted OR 4.0, 95% CI 3.7, 4.3). After adjustment for patient level variables the proportion of PIP varied fourfold (0.5 to 2 times the expected proportion) between prescribers but the majority of this variation was not significant.

Conclusion: PIP is of concern for all prescribers. Interventions aimed at enhancing appropriateness of prescribing should target patients taking multiple medications.

Keywords: Potentially inappropriate prescribing, General practice, Prescriber variation, STOPP, Older populations

Background

Clinical practice guidelines and prescribing indicators have become a common feature in many healthcare systems in an attempt to reduce unwarranted physician variation in medical care, improve quality and control

of drugs to be avoided in older people independent of diagnosis and in the context of certain diagnoses [4-6].

There has been little research on the prevalence of PIP in primary care populations or how it varies between both patients and general practitioners (GPs) [7]. The

Research

Anthony J Avery, Maïsson Ghaleb, Nick Barber, Bryony Dean Franklin, Sarah J Armstrong, Brian Semmings, Soraya Davison, Anette Proyer, Rachel Howard, Dawnmawo Tsabi and Raymond L Mubwa

The prevalence and nature of prescribing and monitoring errors in English general practice: a retrospective case note review

a retrospective case note review

Abstract

Background Primary care is a central aspect of prescribing errors in general practice, in the United Kingdom.

Aim To determine the prevalence and nature of prescribing and monitoring errors in general practice in England.

Design and setting

Prescription errors were reviewed in a primary care practice in England. A total of 12 months' worth of general practice records were reviewed.

Errors were identified in 12 months' worth of general practice records. The errors were identified in 12 months' worth of general practice records.

Errors were identified in 12 months' worth of general practice records.

INTRODUCTION

The prescription of medication is the most common form of medical treatment in primary care and over 100 million items are dispensed in the community in England each year [1]. Prescribing is therefore an essential skill for GPs. For some prescribing decisions, the potential for benefit needs to be balanced against the risk of harm. The prescriber must use clinical knowledge to apply bodies of evidence, rules, and guidance to a prescribing decision, while also taking into account the patient's view. The challenge of prescribing has increased, owing to the increased complexity of medical care, and the treatment of older and more severely ill patients. Errors can occur in this process in primary care, including errors taken per prescription form vary from less than 1% to over 40%, the latter being a Swedish study where failure to document the indication for a drug was considered an error. Such variation in error rates is likely to be significantly affected by the definition of error and the region with which error definitions

errors in primary care are a preventable source of harm, with a systematic review showing that they account for around 3.7% of hospital admissions [2].

Relatively little is known about prescribing errors in general practice, or the factors associated with error. In one study, prescriptions were screened by community pharmacists for prescribing errors; prescribing errors were identified in 17% of prescribed items [3]. A study in care homes showed that 30% of 256 residents had one or more prescribing errors, with 6.2% of prescriptions being for incorrect prescriptions being affected [4]. According to the UK's National Patient Safety Agency, 24% of general practice incidents reported to the National Reporting and Learning System relate to medication, and 25% of adverse incidents that resulted in litigation claims in general practice were a result of medication errors, suggesting consequences not only for patient safety but also for practitioners [5]. Given the priority of research in this field, a large scale study was conducted, with

Anthony J Avery, Maïsson Ghaleb, Nick Barber, Bryony Dean Franklin and Sarah J Armstrong

Causes of prescribing errors in English general practices: a study

a study

INTRODUCTION

Prescribing is an essential task for any doctor. It involves weighing up the benefits of treatments against the risk of possible harm. Over 100 million items are dispensed in the community in England each year [1], yet relatively little is known about the prevalence and underlying causes of prescribing errors in general practice [2]. Our study explored the causes of preventable, drug-related admissions to hospital and found problems at multiple stages in the medication use process, including prescribing [3]. The STOPP study investigated the causes of prescribing errors by foundation trainees in secondary care and assessed many factors that led to errors [4]. The study team also conducted a major study of the causes of prescribing errors in an English hospital, and identified many risk factors, including inadequate training and an absence of self-assessment of errors [5]. A systematic review in 2007 concerning the causes of prescribing errors in an English hospital, and identified many risk factors, including inadequate training and an absence of self-assessment of errors [6]. A systematic review in 2007 concerning the causes of prescribing errors in an English hospital, and identified many risk factors, including inadequate training and an absence of self-assessment of errors [6].

little attention. A national reporting and learning service, established to collect spontaneously reported accounts of health-related error, received very little data from primary care organisations [7]. In the absence of evidence, the aim of the study was to explore the causes of prescribing and monitoring errors, and provide key recommendations for how they may be overcome. This article presents the qualitative findings from the largest, mixed methods, study conducted over 2 years in a broad range of general practices in England [8].

METHOD

Ninety-seven practices across three primary care trusts (PCTs), the UK primary health care organisations in place at the time of the study, with differing characteristics (inner-city London, urban and suburban, and/or rural) were sent a letter and information sheet asking them to take part. All practices replied with 20 expressing an interest in participating. Of these, five practices in each of the PCTs were purposively selected using into account differences in demographic characteristics. Practitioners received a 75-random sample

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Journal homepage: www.elsevier.com/locate/journal

Cost-effectiveness of an electronic medication ordering system (CPOE/CDSS) in hospitalized patients

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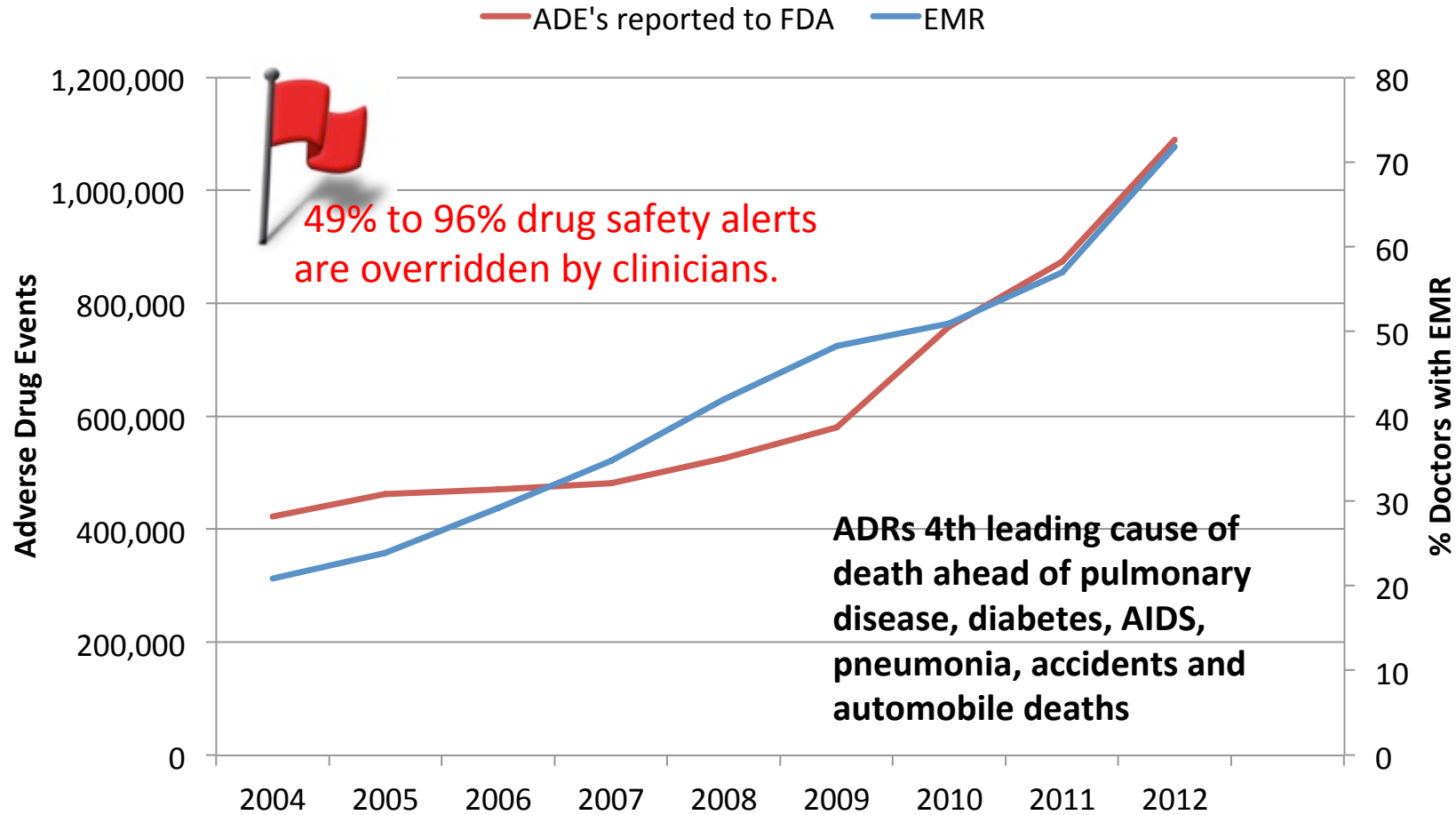
ABSTRACT

Introduction: Prescribing medication is an important aspect of almost all in-hospital patient regimens. Besides their obviously beneficial effects, medicines can also cause drug events (ADEs), which increase morbidity, mortality and health care costs. Partial ADEs arise from medication errors, e.g. at the prescribing stage. ADEs caused by drug errors are preventable ADEs. Until now, medication ordering was primarily a paper process and consequently, it was error prone. Computerized Physician Order Entry (CPOE) with basic Clinical Decision Support System (CDSS) is considered to be a patient safety. Limited information is available on the balance between the benefit and the costs that need to be invested in order to achieve these positive effects. An study was to study the balance between the effects and costs of CPOE/CDSS compared the traditional paper-based medication ordering.

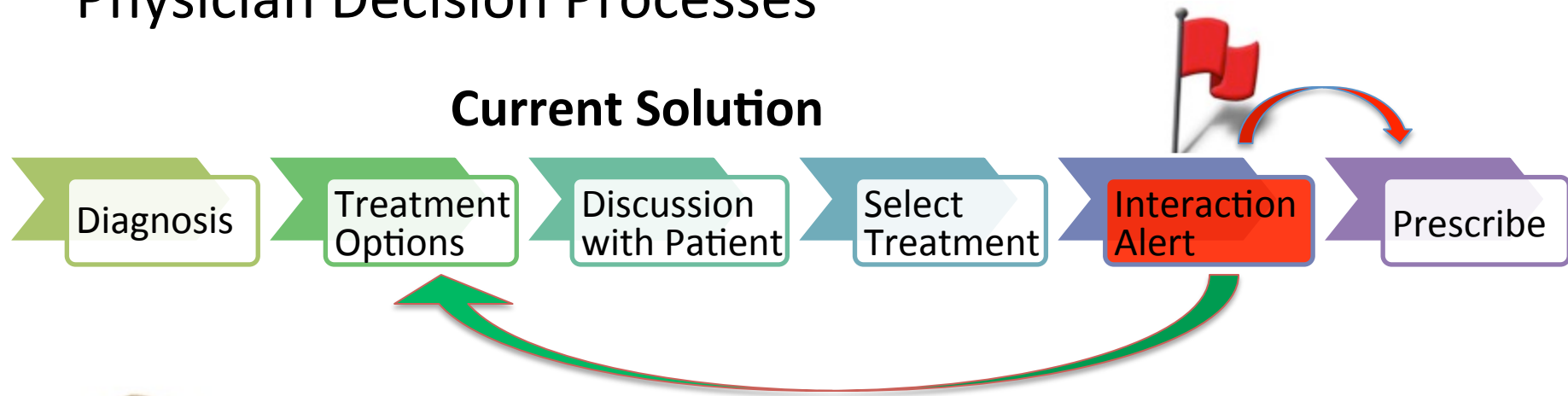
Methods: The economic evaluation was performed alongside a clinical study (intermittent time series design) on the effectiveness of CPOE/CDSS, including a cost minimization or a cost-effectiveness analysis. Data collection took place between 2007 and 2008. Analysis was performed from a hospital perspective. The study was performed in a general teaching

Adverse Drug Events

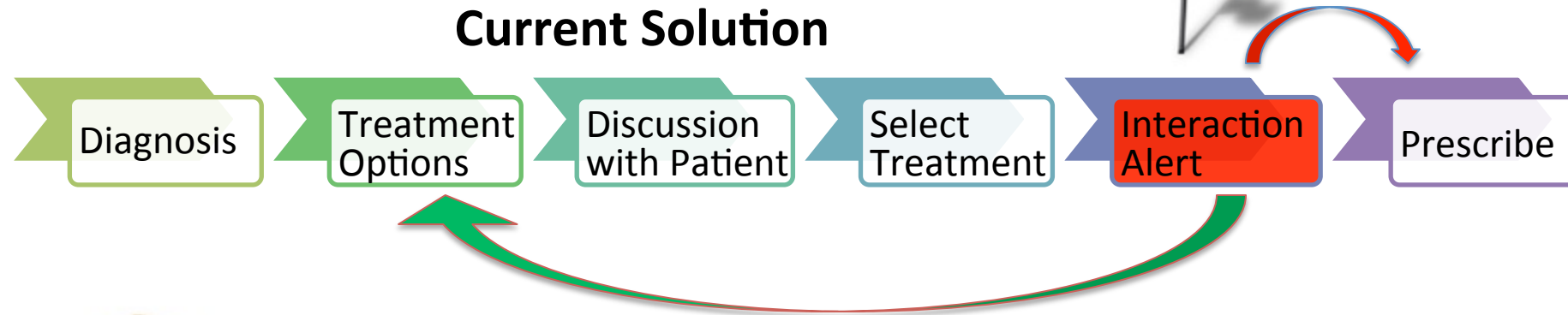
Adverse Drug Events & EMR Use (%) by Year



Physician Decision Processes



Physician Decision Processes



TreatGx Solution



Quality

- Who defines this
- People? Or Professionals?
- A1Q = a people based professional approach
- Hospital= What can I do to improve your stay?
- Clinic= What can I do to improve your visit?

Quality comes from A1Q

- The A1Q determines the items patients rank as important to them now.
- From this comes a process to improve the experience
- We still do the EMR QI
- In addition we should also measure what people want



Institute *for*
Healthcare
Improvement

UBC CHAPTER

Reducing Surgical Turnover Time at Richmond Hospital

My IHI Practicum Experience

Jackson Stewart



UNIVERSITY OF
SINCE
1915
BRITISH
COLUMBIA

Take care of our
COLLECTION
For all the things we love
X

The Practicum Experience

- What is the practicum program?
- Quality Improvement (QI) project hosted by IHI involving:
 - Online courses
 - Project development
 - Data collection

Getting Involved

- Recruitment
 - Application process
 - Interviews
- Multi-disciplinary Team Assembly
 - Meeting the team
 - Brainstorming ideas
 - Reviewing hospital requests for IHI projects

Our Project

Reducing Surgical Turnover Time in the Richmond Hospital Operating Room

Introduced protocol
proposal decreasing
turnover potentially by
4 minutes on average



What Have I Learned?

- Interdisciplinary Approach
 - Extremely beneficial
 - An eye-opening experience
 - Networking
- Practically
 - As a healthcare professional in training
 - QI opportunities abundant

What I Would Have Done Differently

- Pitfalls
 - Time/Scheduling
 - Staff compliance
 - Hospital restrictions
- Being realistic with your goals
- Ensure to include the entire team (hospital staff) in your work

How Has This Project Changed My Perspective?

- As a healthcare professional in training
 - Insight into hospital systems
 - Team approach
 - Academics
- Many opportunities for improvement in our local hospitals



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UBC CHAPTER



Quality Improvement Program – Workshops & Seminars



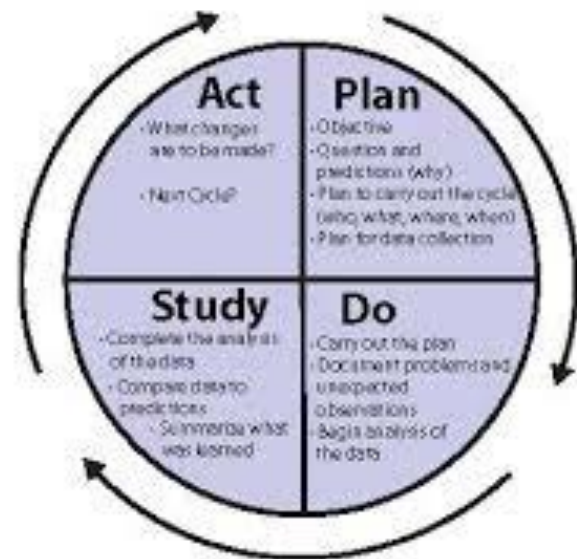
2014-2015 QuIP Directors

Mary Choi & Dimple Prakash





The PDSA Cycle for Learning and Improving





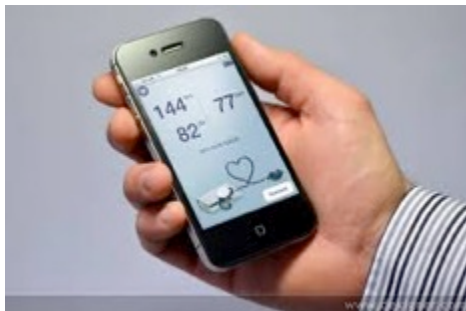
Fundamentals

Human Factors

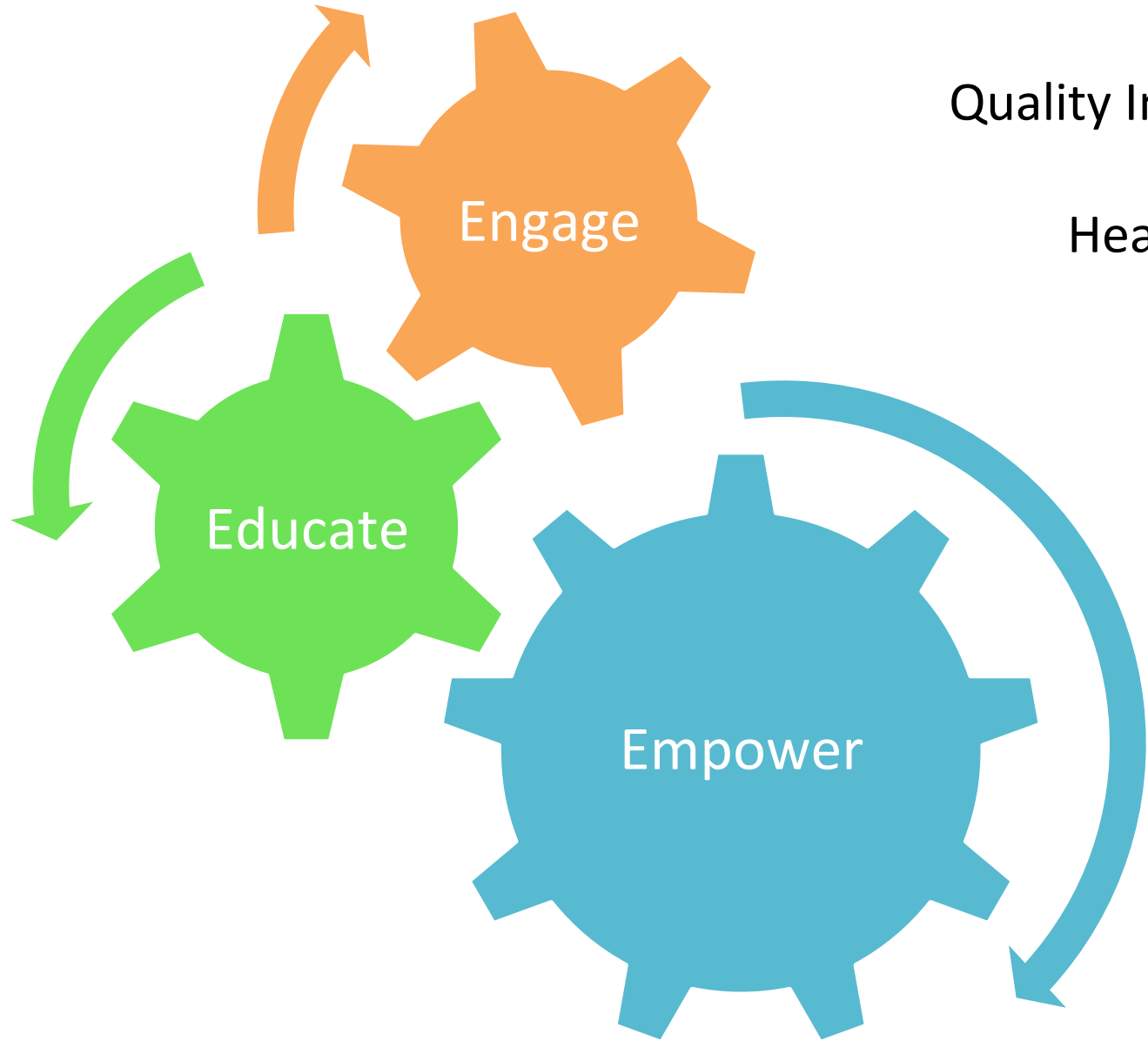
Patient Safety

E-health and Health apps

Communicating w/patients



Doctor-Patient Communication



Quality Improvement
In
Healthcare



Institute *for*
Healthcare
Improvement

UBC CHAPTER

My Shadowing Experience: Human Factors and Quality Improvement at Vancouver General Hospital

Cody Lo

UBC IHI Annual General Meeting

September 29th 2015



Outline



Outline

- About me
- What does shadowing entail?
- What are human factors and quality improvement?
- My experiences at Vancouver General Hospital
- Impact of the program

About Me

- 4th year Pharmacology student
- Participant in IHI shadowing program in 2014
- Recipient of the IHI Quality Improvement Scholarship in 2015
- Experience in clinical and basic science research



What is Shadowing?

- First hand experience of the “day in the life” of a QI professional
- Opportunities to see QI projects being conducted
- Exposure to nuances of jobs in QI
- Building connections in the QI network



“Been following me around all morning.
I think it’s the new intern.”

Human Factors in Healthcare

What is “Quality Improvement” and “Human Factors”?

Environment



Performance



Patient Outcomes

Human Factors at VGH

- Allison Muniak BSc. MSc. is the Human Factors Specialist for Vancouver Coastal Health
- Experience in applying engineering and psychology principles on a variety of healthcare projects across BC



Human Factors at VGH

While shadowing Allison at VGH, I received exposure to two QI projects:

Organization of the equipment storage area at VGH

Procurement of automated UV disinfectant system

Storage Area at VGH

- Organization optimizes work flow
- Disorganization can cause contamination of clean equipment
- Time invested to organizing is justified by the reduced time needed to find equipment



How do we organize our hospitals to make them as efficient as possible?

Product Procurement



OR



**Human factors specialist must analyze
which product is the best fit for the hospital**

Product Procurement



Is it easy to use by providers?

Does it improve quality of care?

Is the technology cost effective?

Impact

- Unique opportunity to see other types of healthcare professions
- Exposure to different areas of hospital functioning
- Ability to build your professional connections

**Scarcity of shadowing opportunities
in healthcare for undergraduates**



Acknowledgements

- UBC IHI Shadowing Program
- Human Factors Department
at Vancouver General
Hospital

Questions?

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IHI Quality Improvement Scholarship: My Experiences at the 2015 Quality Forum

Cody Lo

UBC IHI Annual General Meeting

September 29th 2015



Outline

- What is the IHI Quality Improvement Scholarship
- What is the BCPSQC Quality Forum?
- My experience at the conference
- Impact of the program

IHI Scholarship

- Supports students in attending or presenting at professional QI conferences
- Choose to attend the BC Patient Safety and Quality Council's Quality Forum held in Vancouver, BC
- Deadline October 23rd and conference is in February



Quality Forum 2015

- Organized by the BC Patient Safety and Quality Council
- Two day conference with over 60 breakout sessions of presentations and interactive workshops, plenary talks and poster session
- Attended by physicians, nurses, pharmacists, allied health professionals, patients and students

Thrives on the diversity of its attendees and presenters

My Experience

- Interesting breakout sessions that target various areas of health care
- Dr. Lucy Savitz discussed the social determinants in wellness and optimal health care delivery in Utah



Health does not equal healthcare

My Experience

- Integration of patient safety principles into the curriculum of professional health programs

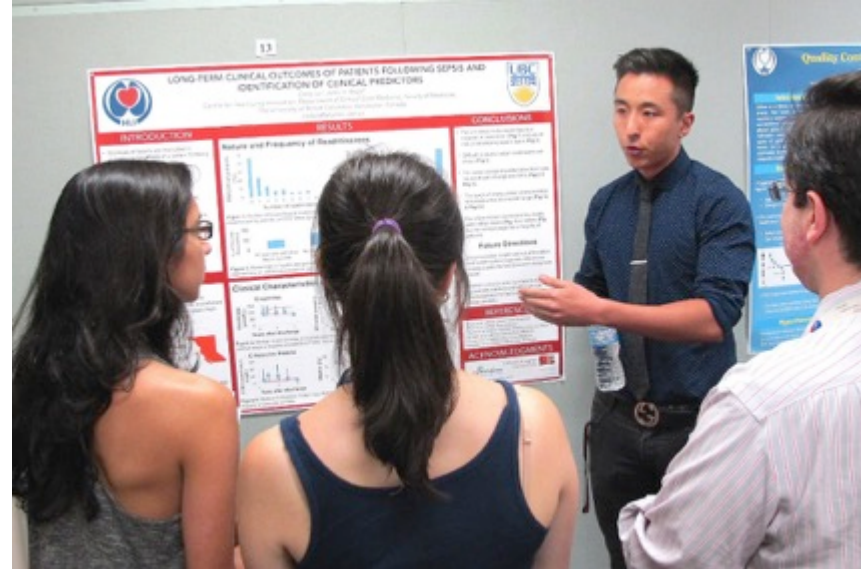


“Old habits die hard”

**Change cannot be implemented by
only one subset of professionals alone**

My Experience

- Presented poster on the challenges that physicians face when patients want to pursue experimental and potentially dangerous treatments
- Received unique feedback from the attendees that helped guide my work going forward



Impact of the Program

- Exposure to current research and issues being discussed in the field of QI
- Opportunity to network with QI minded professionals from variety of areas
- Gain valuable feedback on a QI project that you may be involved with

Lack of opportunities to attend professional conferences for undergraduates

Acknowledgements

- UBC IHI Quality Improvement Scholarship
- Dr. Judy Illes

Questions?

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NATIONAL CORE FOR
NEUROETHICS



LA NEUROÉTHIQUE

THE UNIVERSITY OF BRITISH COLUMBIA



BC PATIENT SAFETY
& QUALITY COUNCIL



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UBC CHAPTER

Upcoming

IHI UBC Events

November

- ▶ *Challenges and Solutions in Delivering Healthcare to Marginalized Populations*

March

- ▶ TBA

QuIP Workshops

November

- ▶ *Unleashing the Potential in Healthcare Trainees: Mobilizing for Improvement and Patient Safety*

Deadlines

Scholarships – October 23, 2015

Practicum – Late November

Shadowing – Anytime!

Contact Us



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