Quality Improvement and the VHO Global Safety Challenge

aul Gimson, Programme Lead for Primary Care and edicines Safety

KMI Practice Development Seminar, 12th September 2018





Lemon Juice

n 1601, James Lancaster successfully conducted an experiment to illustrate the effectiveness of lemon juice to prevent scurvy. When did the British Navy adopt this reatment?

- 1. 1602
- 2. 1689
- 3. 1757
- 4. 1796

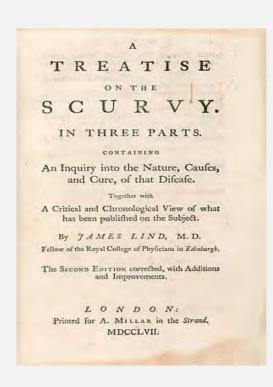
_emon Juice

n 1601, James Lancaster successfully conducted an experiment to illustrate the effectiveness of lemon juice to prevent scurvy. When did the British Navy adopt this reatment?

- 1. 1602
- 2. 1689
- 3. 1757
- 4. 1796 (195 years later)

The Improvement Workshop

eatment of Scurvy



- Stephen J. Bown Scurvy: How a Surgeon, a Mariner, and a Gentleman Solved the Greatest Medical Mystery of the Age of Sail; St. Martin's Press, 2004
- In 1601 lemon juice, as a protective against scurvy, is recorded by James Lancaster.
- In 1612, Woodall recommended citrus fruit for protection against scurvy on sea voyages.
- In 1753 James Lind published A Treatise on the Scurvy which portrays his experiment on-board the ship Salisbury in 1747.
- From 1772 to 1775 sailors on historic voyages with Captain James Cook remained free from scurvy.
- In 1796 lemon juice was officially introduced in the British Navy as a prophylactic against scurvy.
- In 1865 British Board of Trade adopted the policy for the merchant marine.



Bacteria

- How long did the NIH take to recommend the treatment of ulcer as suggested by
- Marshall in his 1984
- _ancet Article?

- 1. 2 years
- 2. 5 years
- 3. 10 years
- 4. 20 years

Bacteria

How long did the NIH take to recommend the treatment of ulcer as suggested by Marshall in his 1984

_ancet Article?

- 1. 2 years
- 2. 5 years
- 3. 10 years
- 4. 20 years

Treatment of Ulcer - Marshall

The Lancet · Saturday 16 June 1984

UNIDENTIFIED CURVED BACILLI IN THE STOMACH OF PATIENTS WITH GASTRITIS AND PEPTIC ULCERATION*

BARRY J. MARSHALL

J. ROBIN WARREN

Departments of Gastroenterology and Pathology, Royal Perth Hospital, Perth, Western Australia

Summary Biopsy specimens were taken from intact areas of antral mucosa in 100 consecutive meanting patients presenting for gastroscopy. Spiral or brived bacilli were demonstrated in specimens from 58 means. Bacilli cultured from 11 of these biopsies were grambegative, flagellate, and microaerophilic and appeared to be a fire species related to the genus Campylobacter. The bacteria stree present in almost all patients with active chronic patricts, duodenal ulcer, or gastric ulcer and thus may be an apportant factor in the actiology of these diseases.

- 1979: Dr. Robin Warren, pathologist at Royal Perth Hospital, Australia found bacteria in stomach of patients
- 1981: Dr. Barry Marshall starts residency
- 1982: Marshall cultivates bacteria: Helicobacter pylori, 100% in Duodenal Ulcer and 77% in Gastric Ulcer
- 1984: first publication in Lancet; presents treatment of ulcer with common antibiotic
- 1994: National Institute of Health recommends treatment of ulcer as suggested by Dr. Marshall

The Improvement Workshop

QI

n an article in the Journal of Quality Improvement, 22 QI projects were compared. What was the timeframe from problem dentification to completion of first pilot?

- 23 days
- 60 days
- 397 days
- 504 days

Q

n an article in the Journal of Quality Improvement, 22 QI projects were compared. What was the timeframe from problem dentification to completion of first pilot?

- 1. 23 days
- 2. 60 days
- 3. 397 days
- 4. 504 days

The Improvement Workshop

ournal of Quality Improvement

JOURNAL ON QUALITY IMPROVEMENT

The numbers describe a control—and provide the source tool—for comparing quality improvement projects within and across organizations.

CALITY REPORTS MINE TENANT

A Survey of 92 Quality mprovement Projects

ancon Arma, PrdD anco K. Suban, PE concer November, PrdD

in recent years, a member of distinct time unessent the impact of improvement offorts on the organiazions." The findings have been existed, some netting that patient materimes are more forely to be approved when regionistations implement persons provement. Others show on difference among engatations that do not do not implement process provement. Such variations in the relatable have crossed interest in examining the processes of provement that unconstitute use.

This article, based as 3 years of data redictions, sets the project in the unit of analysis to describe a risky of improvement efforts and their simpled on a organizations that springered them. In insulate to error shados of the impact of process improvement, a boats here is on the improvement excited rather to the clinical pressure and pattern to account, on the

worder Allend, PhD, a danafase Frances of Management, sign of Maning and Flatath Science, Grays Malana Linnity Farths, Vigence Farthal Salaha, PK, is Chef Barhe United Barcaston Sing Grays Franciscope, Loc, Barragence Darker United words, PhD, a Flatana, Flagar univer Epidemiology Class Hamer Kleine Libraria; Christian Epidemiology Class Hamer Kleine Libraria; Christian Salaha Salaha, Grays Manine University, 4000 Univertificate Salaha, Grays Manine District, 4000 Univertificate Bartine, M. (2018), pinner 2007/20, 1629; a small my districtioning university.

right \$ 200 years little Commonwell November of Homes Pages

costs diff waterway I'd

steps involved in the planning and execution of the projects rather than the law clinical practices.

Mothods

Source of Data

We tuned our analysis on a convenience sample of 52 improvement projects in 32 segmentations. The charactivities of the organizations included in the study are reported in Table 1. (p.621). Most (80%) of this improvement projects were conducted by teoperature clinics affiliated with teoperate, and the organizations reported as inversals of 7 years of using CQE.

Methods of Data Collection

For every settentiar from 1998 to 2010, we adood braith administration, micked, and nursing shadous in our intendeciplinary quality improvement (QQ) classes at Covelland State University (Covetand), Class Western Reserve University (Covetand), and George Western Reserve University (Covetand), and George Western Reserve University (Covetand), and George Western Reserve University Covetant (Covetand) and report the performance of process improvement projects. We also adong participants in approximation 318 day long inclusity conditions on equal improvement techniques in Iowa in-distribute their own improvement techniques in Iowa in-distribute their own improvement imms; as of the participants complied.

Survey Questions

We directoped a self-administrated questionicate to missing 70 characteristics of improvement projects

 Alemi F, Safaie F, Neuhauser D. "A Survey of 92 Quality Improvement Projects." Journal of Quality Improvement 2001, 27(11): 619-632

504 days from problem identification to complete of first pilot

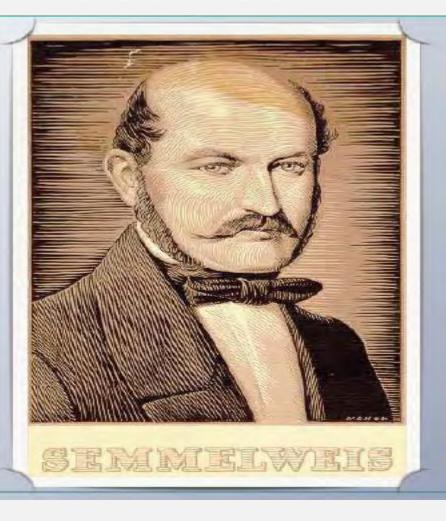
397 days from first team meeting to the end of fire cycle

75 days to describe current situation in flowchart

62 days for data collection if change was improvement

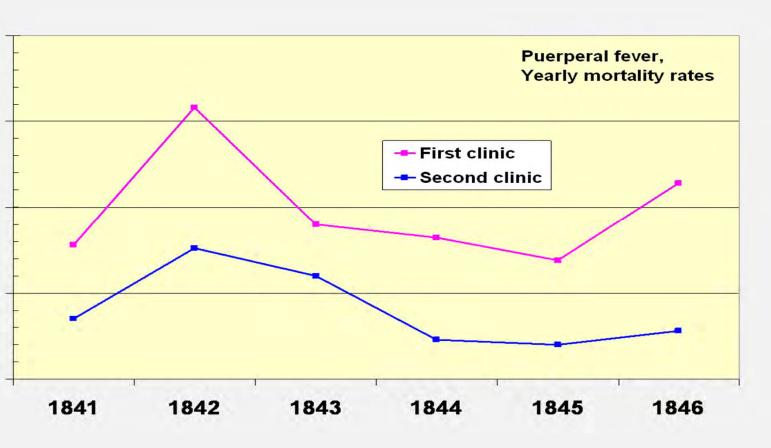
mprovement Workshop

The Saviour of Mothers



- Ignaz Philipp Semmelweis
- Free Antenatal Clinic
- Training for midwifery and medical students

Mortality 10% vs 4%

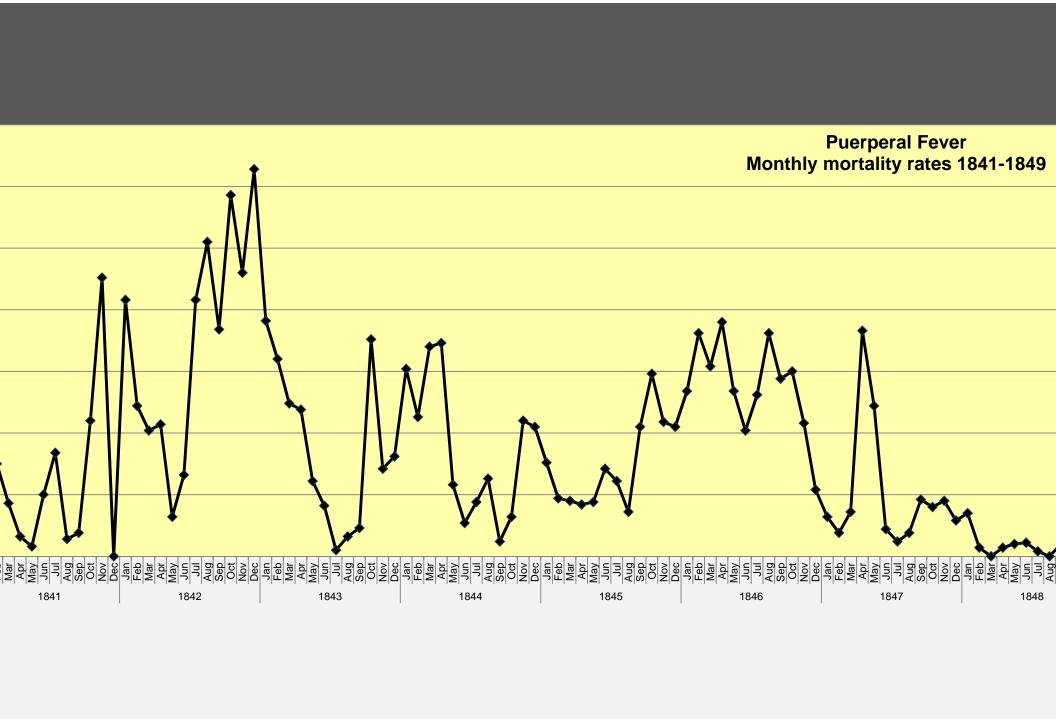


 Even 'street births' had lower mortality

> Hanninen, O.; Farago, M.; Monos, E. (September– October 1983), <u>"Ignaz Philipp</u> <u>Semmelweis, the prophet of</u> <u>bacteriology"</u>, *Infection Control* **4** (5): 367–370

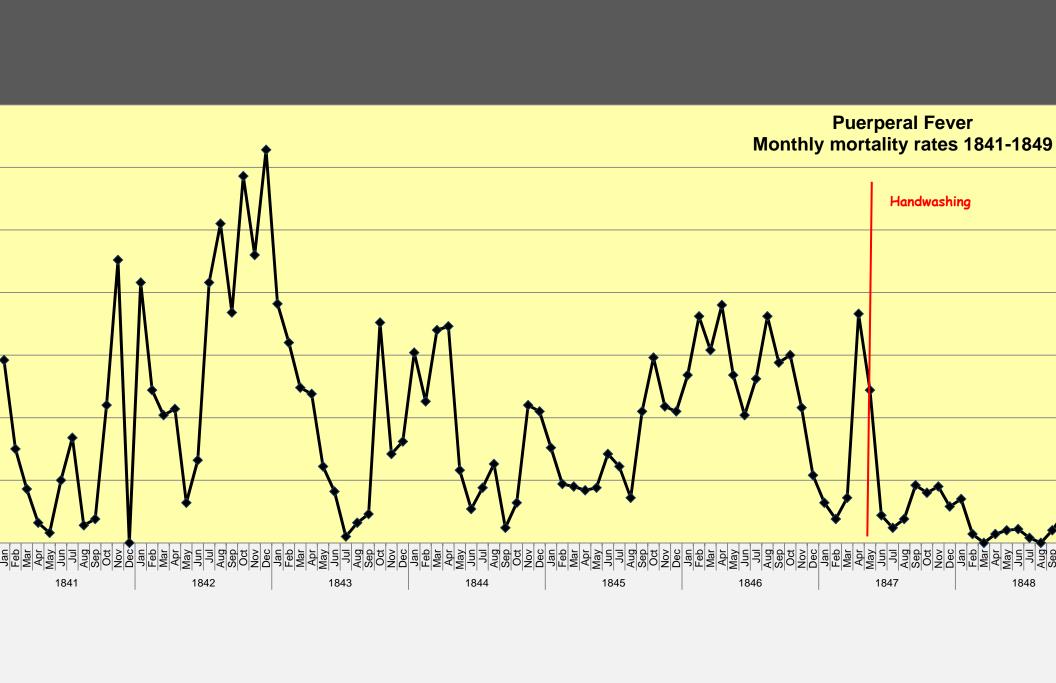
Handwashing





What information can we get from the chart?

- What was the desired outcome from introducing handwashing?
- Where on the chart did handwashing commence?
- A spot measurement of mortality in Feb 1847 and again in Sep 1847 would have revealed what?





hy Quality Improvement

uality improvement is all about 'change'









uality improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

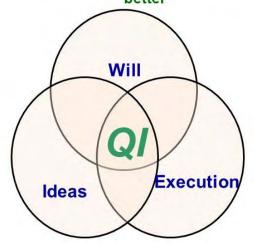
hat change can we make that will result

in improvement?

Key Factors for Quality Improvement

Having the <u>Will</u> (desire) to change the current state to one that is better

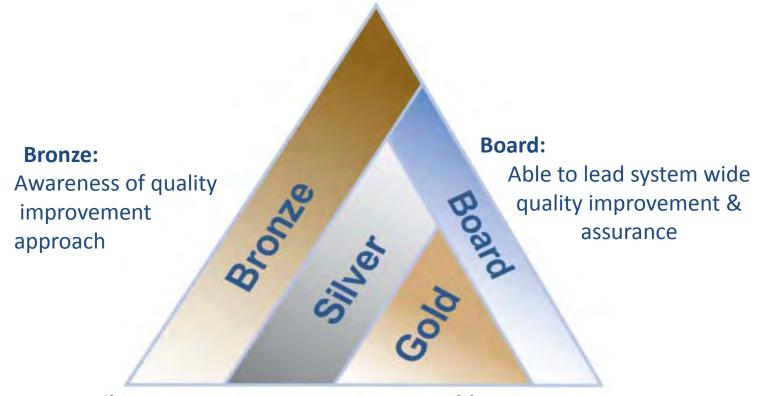
Developing
Ideas that will
contribute to
making
processes and
outcome
better



Having the capacity to apply CQI theories, tools and techniques that enable the <u>Execution</u> of the ideas



Improving Quality Together - Building skill & capability in NHS Wales



Silver:

Able to apply quality improvement approach with support

Gold:

Able to apply quality improvement approach independently and support others



uality Improvement and Medicines Safety

osing the System...









edicines Safety programme in Wales

Improve Quality Improvement Capacity and Capability

- o Bronze training available and promoted to all
- o Silver level training for pharmacy / prescribing lead workforce
- National 'Gold' network for Medicines Safety leads coaching, data support, additio training

Measurement

- National Dashboard
- Process AND Outcome data
- o Medicines admissions, prescribing data and audit plus

National Collaborative Programme

- Quarterly meetings shared learning, education, celebration
- o Key areas Falls, Bleeds, Acute Kidney Injury







