Data is your best friend

A framework for using data to strengthen partnerships and progress ICDM projects

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Project Health

From data to action

'What gets measured, gets done…'

Your world

- **PCP project officers**
  - Have principle role in project facilitation
  - May have limited training in data
  - May lack of confidence in accessing, managing and interpreting data, and using data collection tools
  - May be overwhelmed by how much data there is!

Your world

- **Partner agencies**
  - May participate in project planning to varying degrees
  - May have different levels of influence
  - May perceive different priorities
  - Will have access to data and expertise

"Without data, you are just another person with an opinion . . ." *Terence T. Burton, Managing Director The Center for Excellence in Operations, Inc*

How can data help?

- Strengthen partnerships and support service improvement by:
  - Providing a basis for collaborative planning and review processes
  - Creating a shared and indepth understanding of health issues and priorities
  - Identifying and addressing concerns of all stakeholders
  - Providing transparency for decision making
  - Demonstrating achievement of objectives
  - Identifying areas for further action

Data and quality improvement

DATA →

Data pushes quality improvement by helping to identify and analyse problems

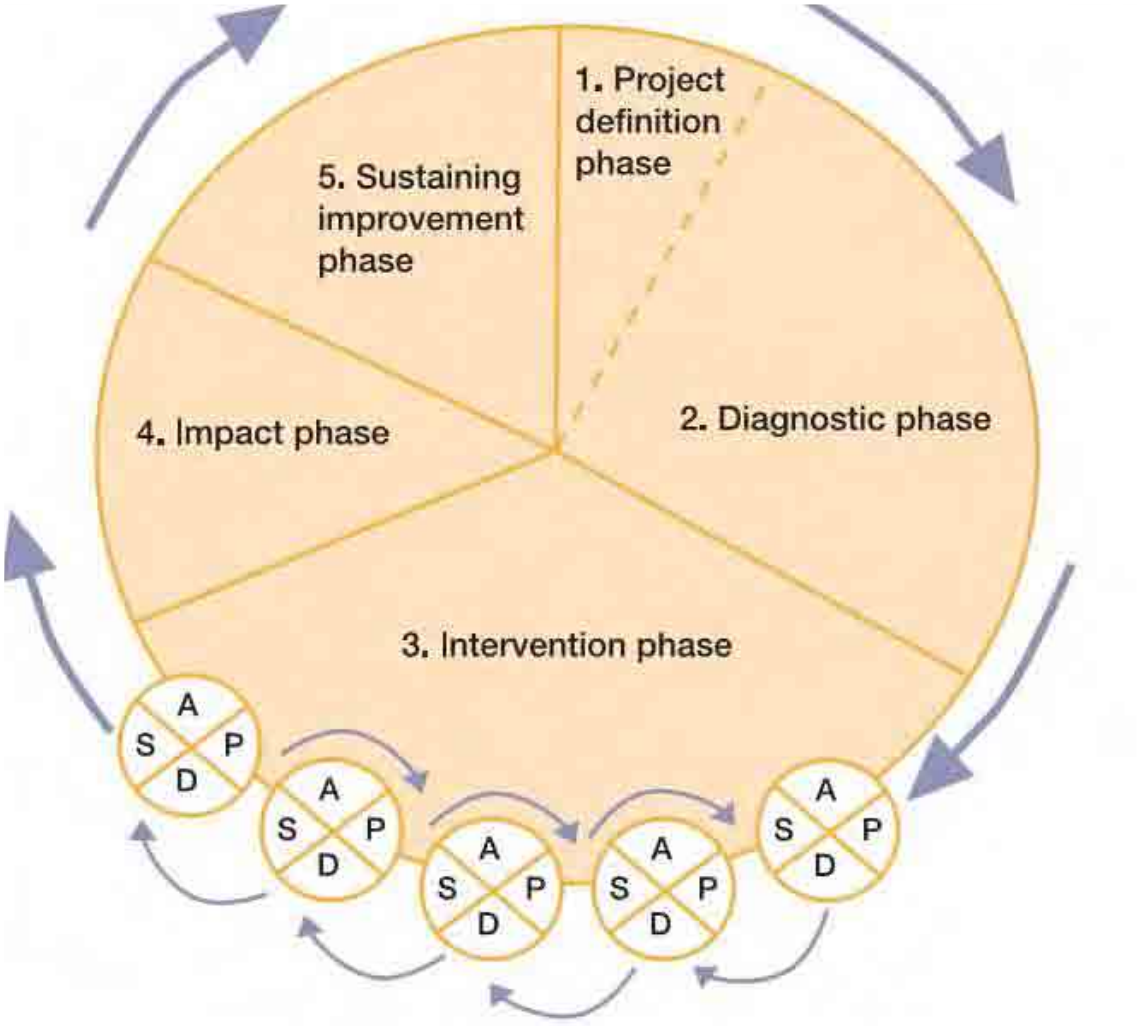
DATA →

Data pulls quality improvement by helping to identify and analyse opportunities

The quality improvement cycle as a framework for data utilisation

The what, when, how and why of data

The quality improvement cycle



Using data to strengthen partnerships and progress ICDM Projects – a framework

Phase and Goal	*Data objectives*	*Data sources & analysis tools*	*Specific examples available to PCPs*
Project definition phase Use data to define the problem, project or opportunity	• Assess current performance and identify performance gaps • Understand the needs and opinions of stakeholders • Prioritise problems and improvement projects • Establish overall aims and targets for improvement • Establish a clear case for the need for improvement	Benchmarking Clinical indicators Service utilisation Financial reports	SC & ICDM survey General Practice profiles (appendix to SC & ICDM survey results) Victorian population health survey National health survey Data from other partners
Diagnostic phase Use data to evaluate existing processes and identify opportunities for improvement	• Define the processes and people involved in the processes • Identify problem steps in the process • Identify and prioritise opportunities for improvement • Establish clear objectives for improvement of process steps • Identify barriers and enablers to change	Process mapping Clinical and administrative audits Brainstorming Surveys, interviews, focus groups	Committee meetings, eg. committee reviews best practice disease pathways against available local services Consumer consultation reports SC & ICDM survey General Practice MBS data GP telephone interviews or visits Organisational assessments of chronic illness care systems and processes
Intervention phase Use data to formulate and prioritise improvement strategies	• Determine the most appropriate strategies to address your particular problem and to suit your situation • Prioritise improvement strategies • Compare the benefits of alternative improvement strategies	As above	As above, plus: Improvements gained by other PCPs or similar from implementing the strategies that are being considered Costing and other resources required of various strategies
Impact phase Use data to measure impact and determine effectiveness of improvement strategies	• Assess the impacts of improvement strategies • Identify barriers and enablers to success • Demonstrate the success of the improvement project to stakeholders	As above Clinical and administrative data collection Analytical tools	Highly dependent on the improvement being targeted, but may include: Consumer and health professional testimonials SC & ICDM survey results MBS data – GP profiles Service utilisation numbers
Sustaining improvement phase Use data to guide sustained improvement	• Provide feedback to reinforce change and demonstrate benefits for clinicians and clients/patients • Identify slippage in practice and the need for repeated intervention or change of intervention approach	Ongoing / periodic measurement Secondary data sources (those that don't require direct collection by you solely for this purpose) preferred to manage resource requirements of ongoing monitoring increase likelihood of it being maintained	Highly dependent on the improvement being targeted, but may include: MBS data – GP profiles Victorian population health survey SC & ICDM survey results

Project definition phase

- Assess current performance and identify performance gaps
- Understand the needs and opinions of stakeholders
- Prioritise problems and improvement projects
- Establish overall aims and targets for improvement
- Establish a clear case for the need for improvement

- Benchmarking
- Clinical indicators
- Service utilisation
- Financial reports

Diagnostic phase

- Define the processes and people involved in the processes
- Identify problem steps in the process
- Identify and prioritise opportunities for improvement
- Establish clear objectives for improvement of process steps
- Identify barriers and enablers to change

- Process mapping
- Clinical and administrative audits
- Brainstorming
- Surveys, interviews, focus groups

Intervention phase

- Determine the most appropriate strategies to address your particular problem and to suit your situation
- Prioritise improvement strategies
- Compare the benefits of alternative improvement strategies
- Monitor implementation through PDSA cycles

- Process mapping
- Clinical and administrative audits
- Brainstorming
- Surveys, interviews, focus groups

Impact phase

- Assess the impacts of improvement strategies
- Identify barriers and enablers to success
- Demonstrate the success of the improvement project to stakeholders

- Process mapping
- Clinical and administrative audits
- Brainstorming
- Surveys, interviews, focus groups
- Analytical tools

Sustaining improvement phase

- Provide feedback to reinforce change and demonstrate benefits for clinicians and clients/patients
- Identify slippage in practice and the need for repeated intervention or change of intervention approach

- Ongoing / periodic measurement
- Secondary data sources preferred to manage resource requirements of ongoing monitoring increase likelihood of it being maintained

Presenting and communicating data to engage partners

The goal is to transform data into information and information into insight

Carly Fiorina, President Hewlett Packard 1999

Half empty or half full?

- Writing is tough
- We’re not all experts in communication theory and design!
- May have limited skills in data presentation

But…

- We know our project and we can get help
- We know what we want to achieve and what communication channels are available to us
- There are systems and packages to help us

Where to start

- Plan your communications
  - Understand your purpose and priorities
  - Understand your audience and their motivations
  - Explore all mechanisms available and use them according to priorities
  - Use data to support your key messages
  - Get help

Using data to support communication

- **Keep it simple** – don't include unnecessary data
- **Keep your purpose and message in mind** – what are you trying to say?
- **Include raw numbers and percentages**, and the population (n)
- **Understand and acknowledge the limitations** of the data e.g. low response rate, missing data


STAKEHOLDER PERSPECTIVES
No,
I don't see
any problem
with the data!
www.ComicStripGenerator.com

Example
What's important?

- The most common chronic diseases in Riverbank PCP are diabetes, arthritis and heart disease

- The most common chronic diseases in Riverbank PCP are:
  - diabetes (3.8% compared to 4% across Victoria)
  - heart disease (6.5% compared to 6.2% in Victoria)
  - arthritis (29% compared to 20% in Victoria) ** This is the highest in Victoria

Presentation options

- **Tables** – summary information and statistics
- **Charts**
  - pie – categorical data such as population characteristics
  - Bar graphs and pareto charts – measures of magnitude, comparisons
  - Scatter diagrams
  - Line graphs, control charts

Using statistics

- Statistics are no substitute for judgement
- Consider what they say as well as what they don’t say

A man may have six meals one day and none the next, making an average of three meals per day, but that is not a good way to live *Louis D Braneis*

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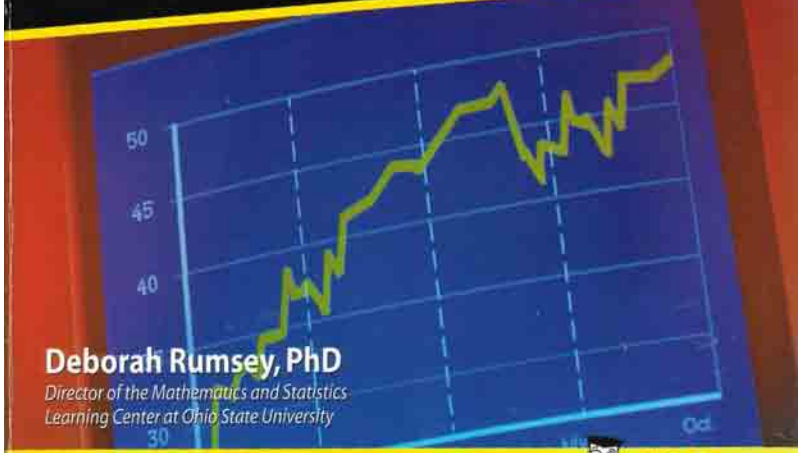

Deborah Rumsey, PhD
Director of the Mathematics and Statistics Learning Center at Ohio State University

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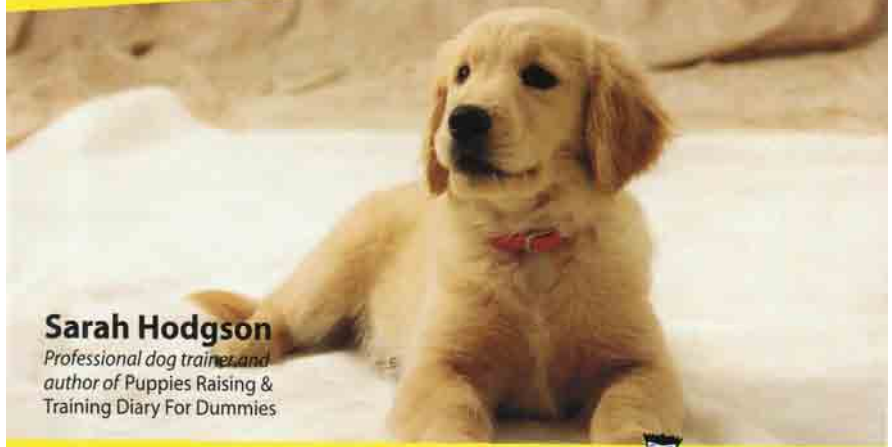

Sarah Hodgson
Professional dog trainer and author of Puppies Raising & Training Diary For Dummies

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Other presentation considerations

- Design and language
  - Highlight important data and conclusions – shaded boxes, dot points
  - Use headings to draw in the reader
  - Avoid long sentences and large paragraphs
  - Avoid jargon

Getting help with data and communication

- **What sort of help?**
  - Search and collation of data from public databases
  - Data analysis, interpretation
  - Statistics
  - Ethical issues
  - Design of databases or data collection instruments; appropriate use of existing data collection tools
  - Presentation of data, writing, communication strategy, design

Seek help early and often……

Getting help

- **Your options**
  - Agency partners
  - Researcher / research assistant
  - Medical librarian
  - Health information services (medical records)
  - IT services
  - Quality manager
  - Ethics committee
  - Universities – epidemiology, statistician
  - Consultants

Torture numbers and they'll confess to anything!

Gregg Easterbrook