From Ideas to Action:
Identifying Change Ideas for Quality Improvement

Jim Handyside

Curriculum Lead, IDEAS

Institute of Health Policy, Management and Evaluation

University of Toronto

Vivian Yu, MHSc, CHE

Program Director, IDEAS

Institute of Health Policy, Management and Evaluation

University of Toronto

www.ideasontario.ca

Outline

- What is IDEAS? You're invited!

- Key principles of IDEAS and your QIP

- Improvement learning structure: Driver Diagram thinking

- Moving between concepts and ideas
  - Alternatives
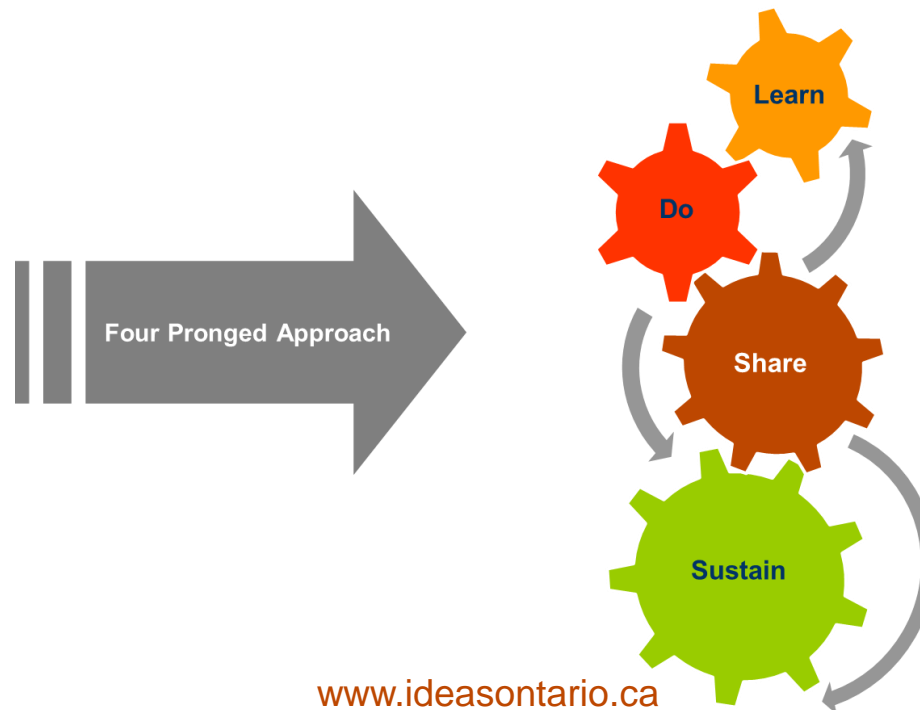
- Lateral thinking
  - Random Entry

ABOUT IDEAS

What is IDEAS?

- IDEAS is a province-wide learning initiative to advance Ontario's health system priorities by building capacity in quality improvement, leadership and change management across all health care sectors.

Four Pronged Approach

Learn

Do

Share

Sustain

Learn. Do. Share. Sustain.

- **Advanced Learning Program**
  - Individuals leading QI projects
  - 9 full-day classes over 5 months
  - Applied learning project supported by coaching
  - Delivered at UofT

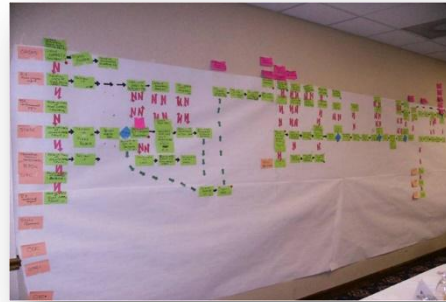- **Introductory Quality Improvement Program**
  - Individuals participating in/would like to participate in QI projects
  - 2 days
  - Delivered by university partners in Toronto, Hamilton, London, Kingston, Ottawa, Northern Ontario and surrounding areas

Learn. Do. Share. Sustain.

Team-Based Approach


Applied Learning

In-Class Learning

- Core Competencies
  - Planning QI in complex adaptive systems
  - Clinical QI theory, methods and tools
  - Adaptive Leadership and personal resilience
  - Data system design and outcome measurement
  - Teamwork, project management tools, change leadership

www.ideasontario.ca

Learn. Do. **Share. Sustain.**

Improving & Driving Excellence Across Sectors

- **Cross-sectoral & interdisciplinary**
- **Team leads and team members across all organizational levels**
- **No tuition/registration fee**
- **Share, sustain and…SPREAD!**
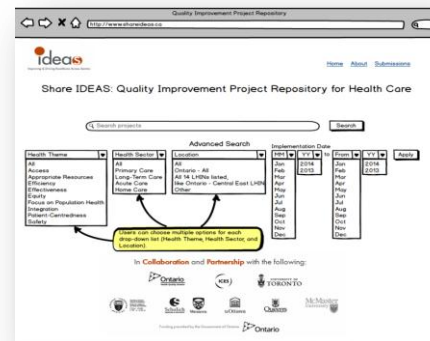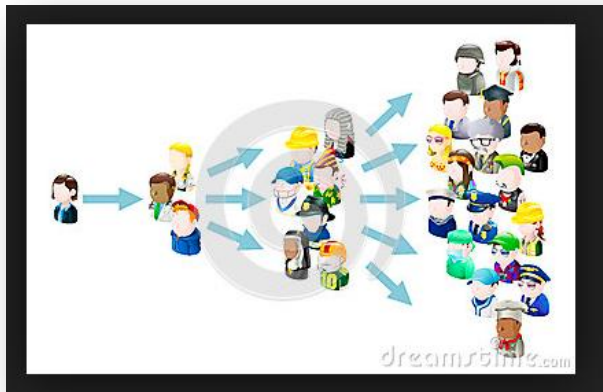
Advanced Learning Program

- Participants
  - Individuals leading QI projects related to health system priorities (e.g. high-needs populations, QBPs, Health Links)
    - Physicians with administrative and clinical responsibilities
    - Nurses, RPNS, nurse practice leaders, nurse practitioners
    - Pharmacists, physiotherapists, other interdisciplinary health professionals
    - Clinical or non-clinical administrators

- Up to four participants can apply per team
  - We encourage teams (2 or more participants) to apply

What's in it for me?

- Looking to improve a quality outcome
  - E.g. falls prevention, reduce restraint use, reduce avoidable ED visits, etc.

- More effective change, more sustained improvement

Examples of IDEAS Projects from LTC

- By December 2014, there will be a 50% reduction in the administration of PRN antipsychotic medications in a specialized care unit

- By October 31, 2014, we will reduce the amount of duplication in completing the nursing admission process by 25% for new long term admissions.

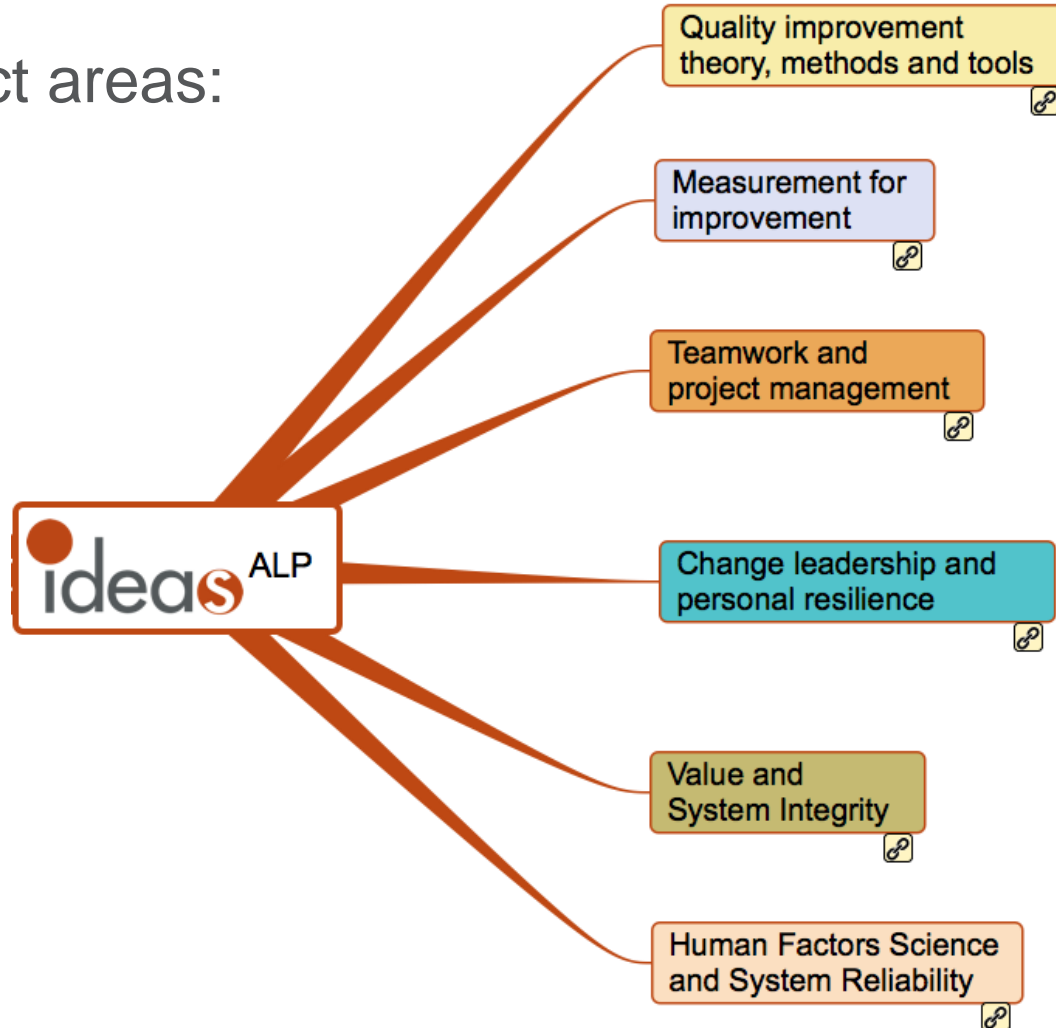For examples of IDEAS projects visit:
https://ideaslearningplatform.com/project-repository/index.htm

IDEAS CURRICULUM PRINCIPLES

IDEAS Advanced Learning Program

Core subject areas:

Quality improvement theory, methods and tools

Measurement for improvement

Teamwork and project management

Change leadership and personal resilience

Value and System Integrity

Human Factors Science and System Reliability

ideas ALP

Subject matter knowledge

Increased Capability to Make Improvements

Profound Knowledge

ideas

Appreciation
of a system

Theory of
Knowledge

Psychology

Understanding
Variation

Aim or Values
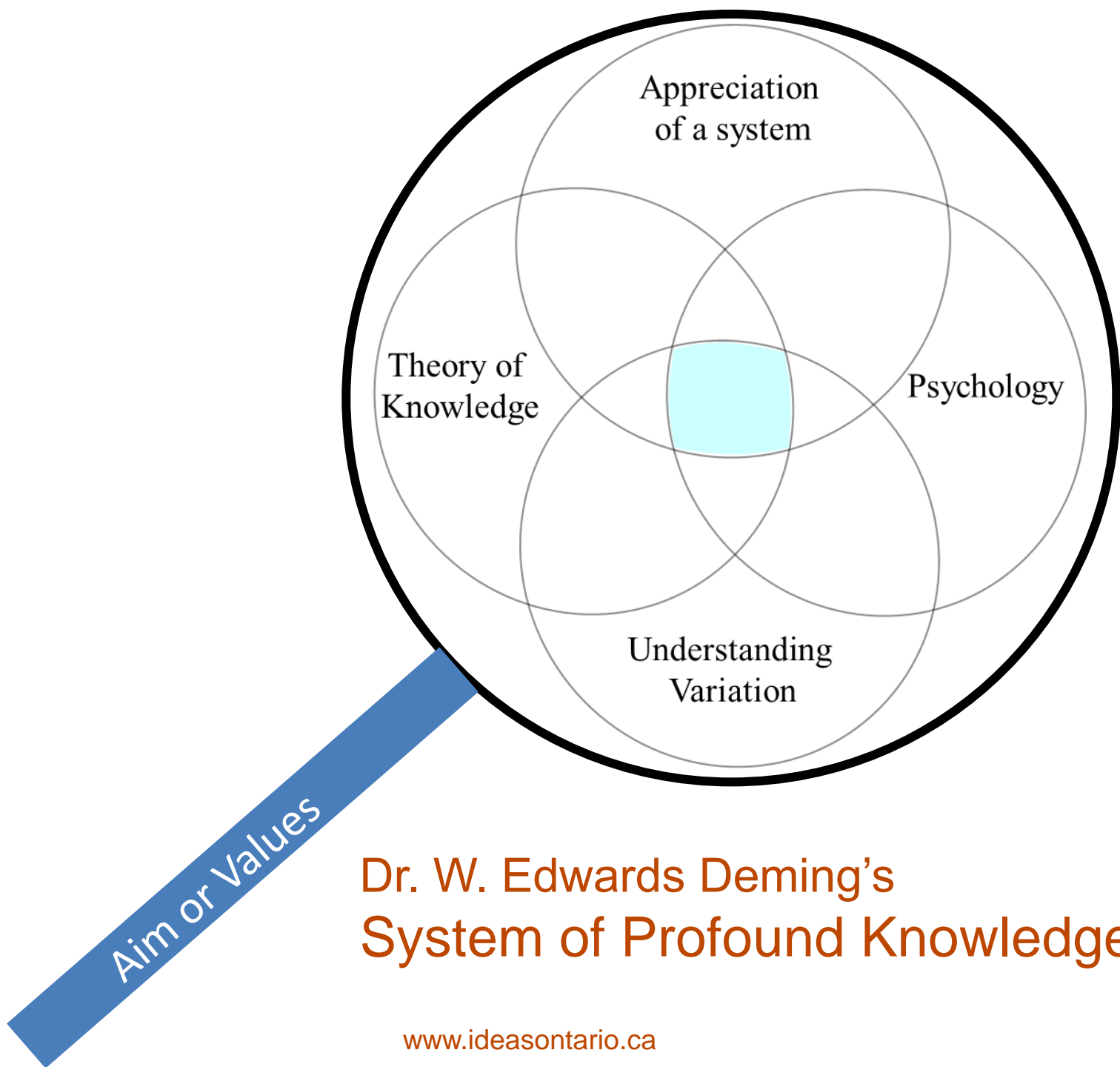
Dr. W. Edwards Deming's
System of Profound Knowledge

Appreciation of a system

Theory of Knowledge · **Appreciation of a system** · **Psychology** · **Understanding Variation** · Aim or Values
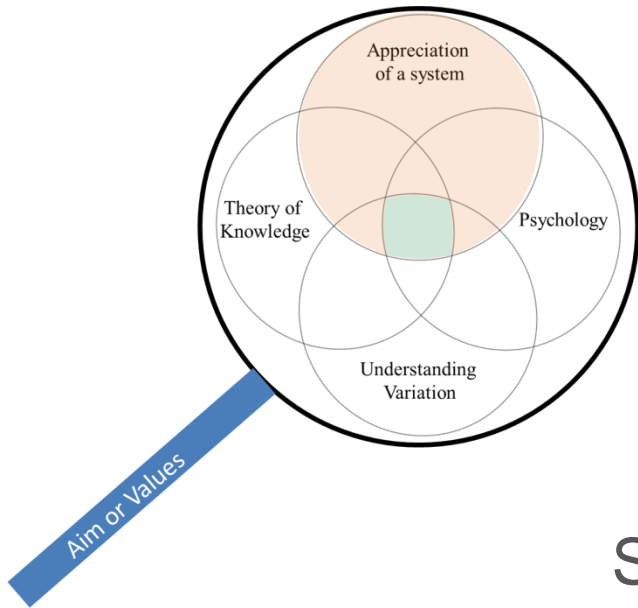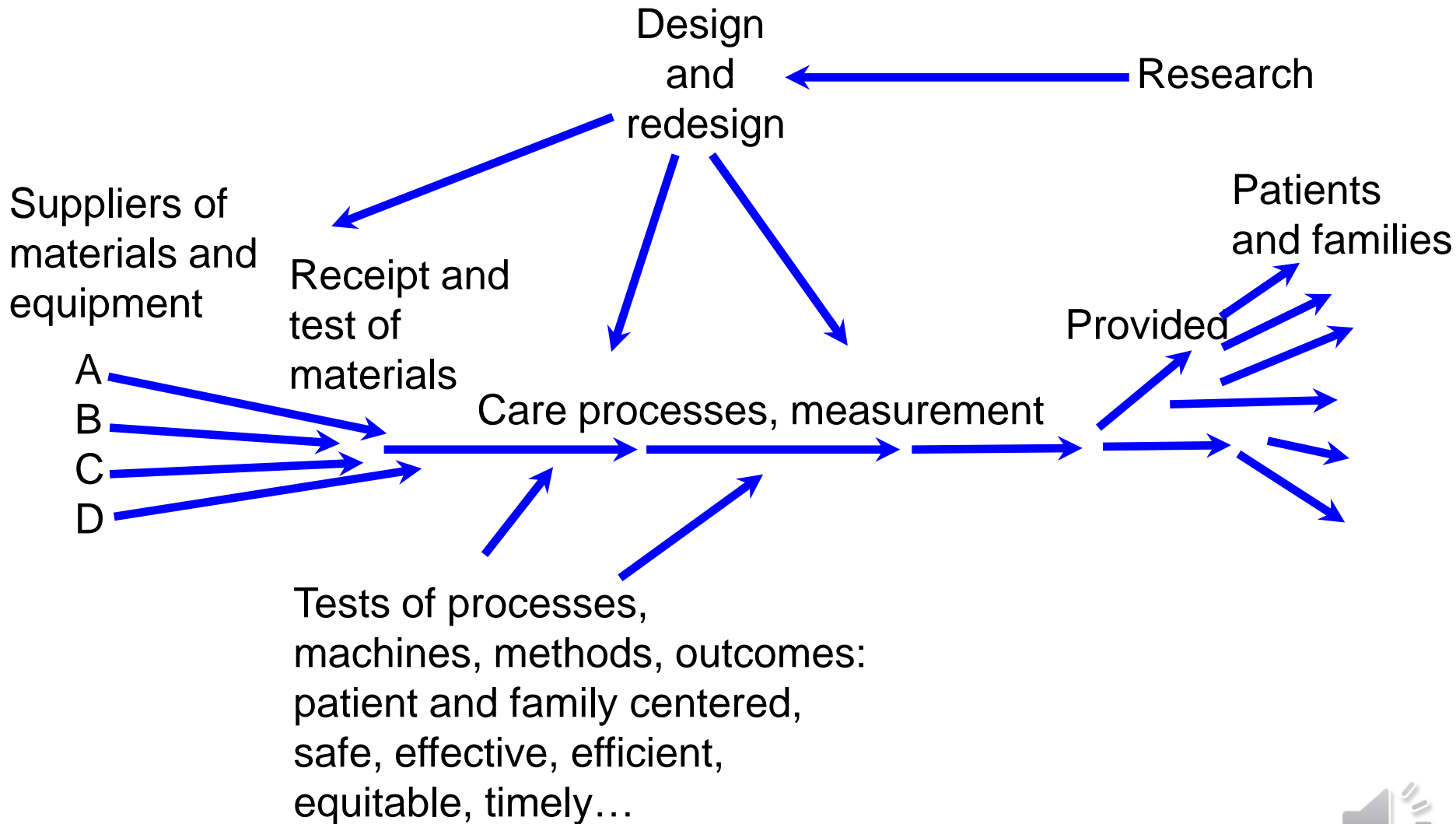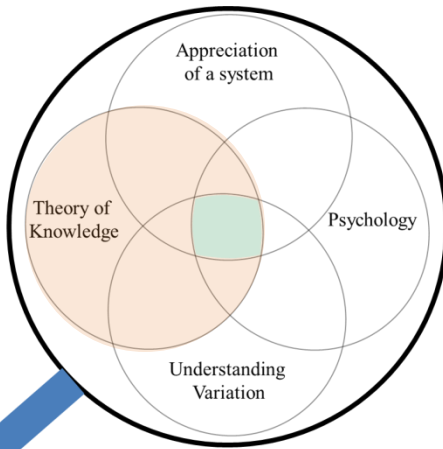
Systems Thinking:

A system is an interdependent group of items, people or processes working together toward a common purpose.
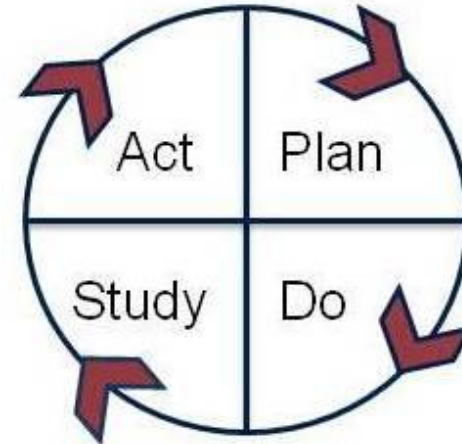
Care viewed as a system

Based on Deming's *Production viewed as a system*

Design and redesign

Research

Suppliers of materials and equipment

A
B
C
D

Receipt and test of materials

Care processes, measurement

Provided

Patients and families

Tests of processes, machines, methods, outcomes: patient and family centered, safe, effective, efficient, equitable, timely…

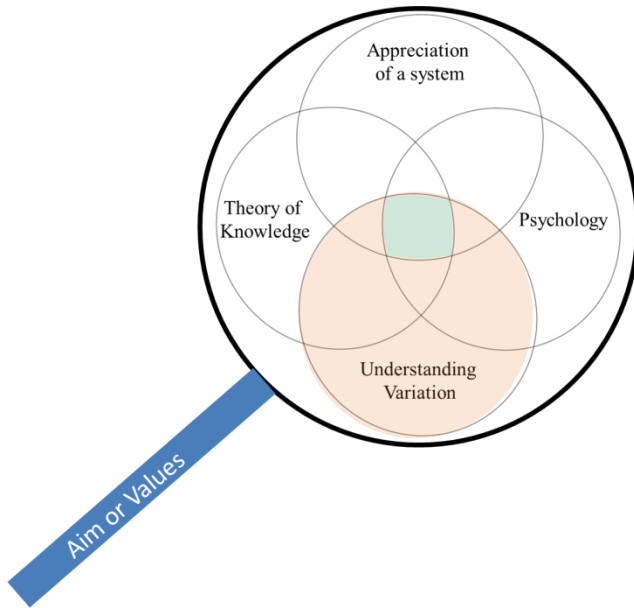# Theory of knowledge

When change is tested, comparing predictions to results, to **build knowledge**
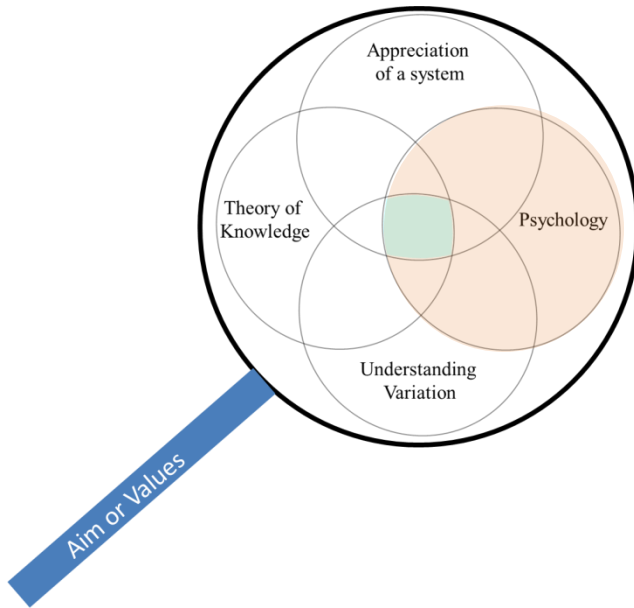
Understanding variation

All systems demonstrate variation of two types:

1. Common cause
2. Special cause

ideas

Improving & Driving Excellence Across Sectors

www.ideasontario.ca

Psychology

The human side of ***work*** *and* ***change***

CHANGE: SOURCES AND IDEAS

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

Act | Plan

Study | Do

Langley, Nolan, Nolan, Norman, Provost;
The Improvement Guide, 1996
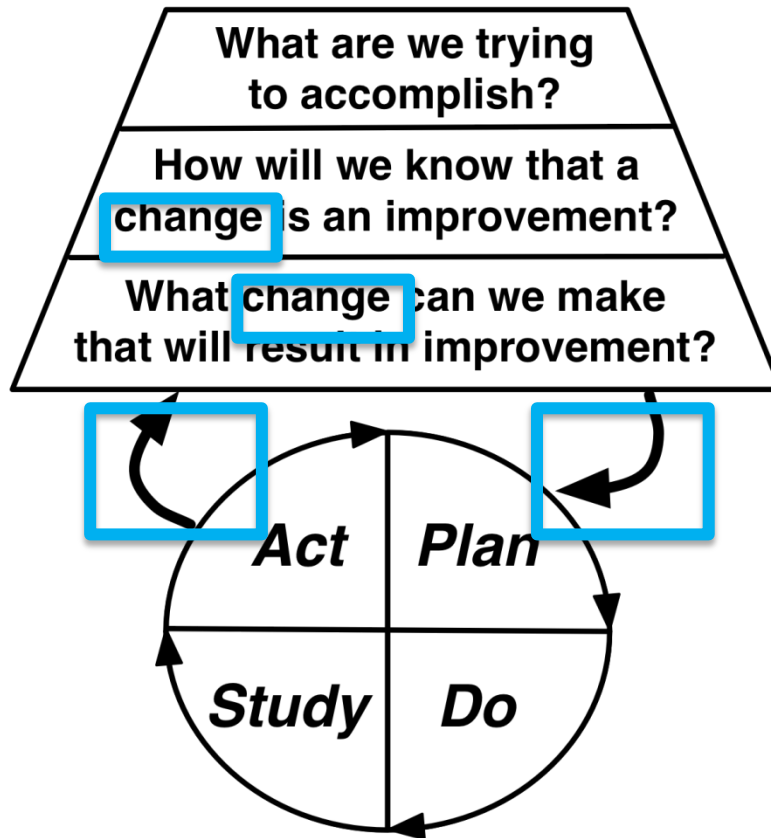
Change:
the key to
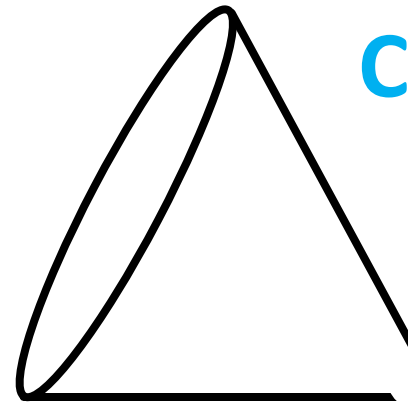improvement

Evidence

Experience

Current State

Concepts

Change

Creativity

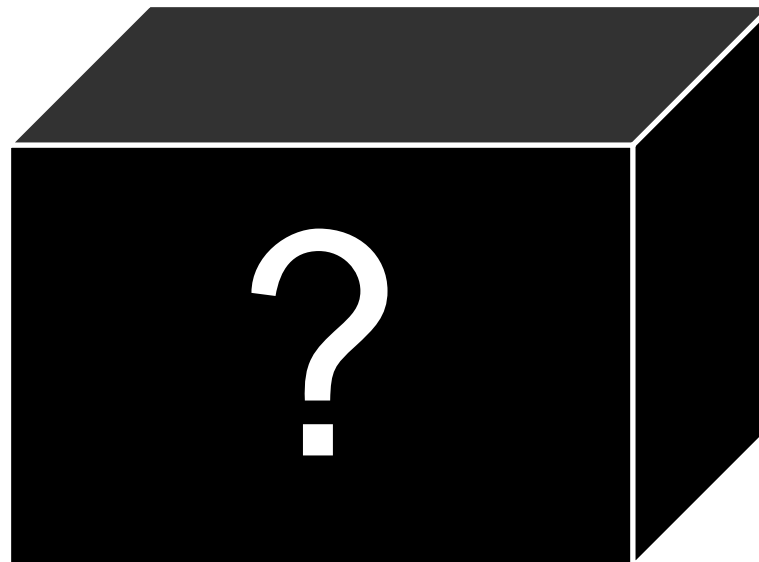# IMPROVEMENT LEARNING STRUCTURE: DRIVER DIAGRAM

Why Use a Driver Diagram?

Improvement Aim

A new process, system, culture…

?

Effective change is not a "black box".

Driver Diagrams help answer planning questions, like:

- HOW could we achieve our aim?

- What are ALL the changes?

- Are there priorities (emphasis)?

- Are there alternatives?

- What is the sequence?

- Who will do what when?

What is a driver diagram?

- A means of developing your theory of how you will achieve your aim.

- Breaks down your improvement work into a plan of organized change: development, testing and implementation.

A simple example

Lose 10 pounds by the end of November
- Exercise More
  - Ride bike to work
  - Join fitness club
  - Record my activity
- Reduce Consumption
  - Stop eating sweets
  - Stop drinking cola and beer
  - Record what I eat
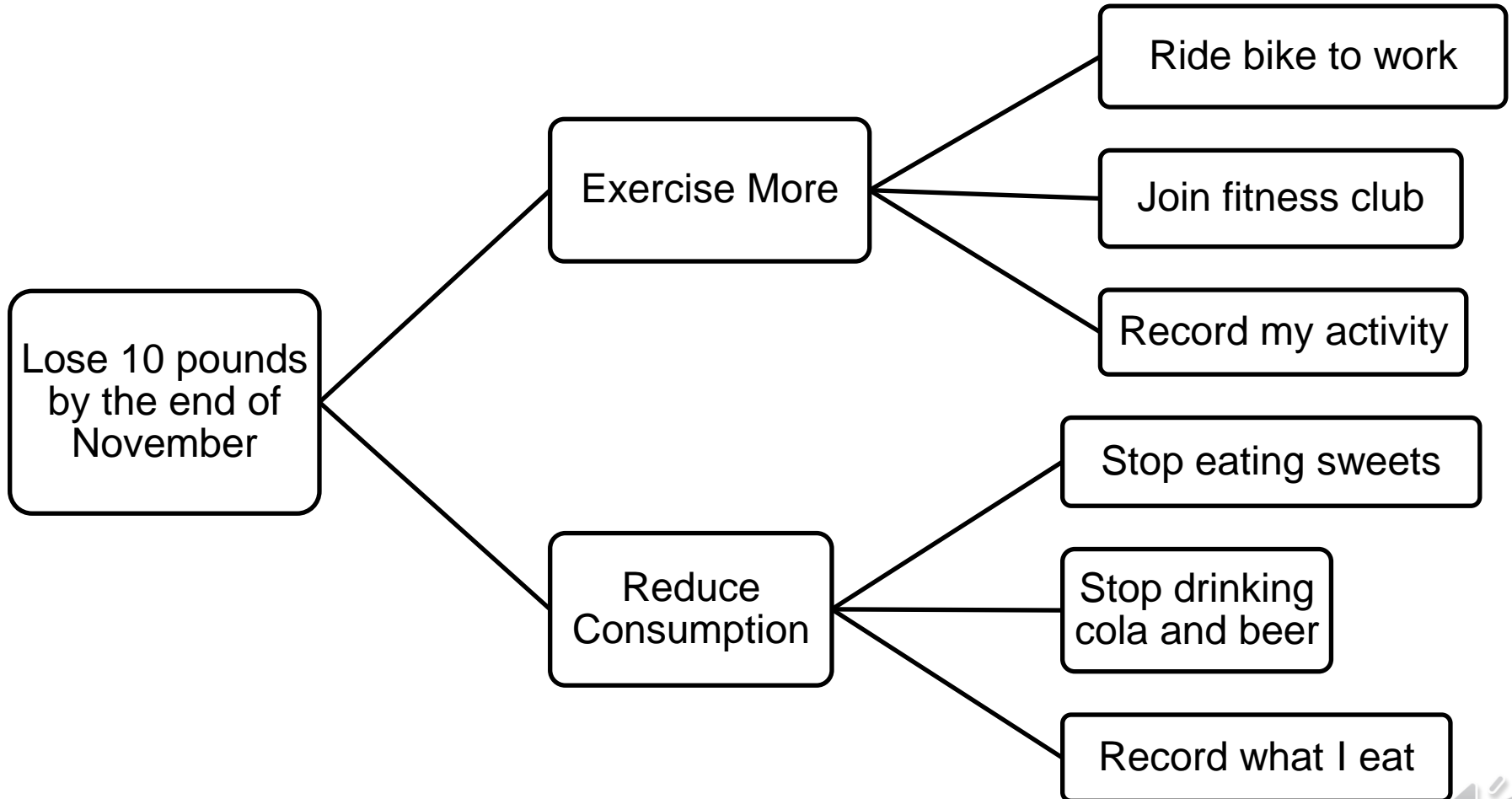
Healthcare QI example

Reducing harm from pressure ulcers

AIM

Eliminate new Grade 3 and 4 pressure ulcers by 31 March 2014

Reduce the number of Grade 2 pressure ulcers acquired under our care by ….% by 31 March 2014

Reference: East London NHS Quality Improvement Programme

PRIMARY DRIVERS

SECONDARY DRIVERS

Risk identification
- Understand pressure ulcer risk factors
- Analyse local data to assess patients at risk

Risk assessment
- Assess pressure ulcer risk on admission
- Reassess regularly
- Communicate risk status

Reliable implementation of SSKIN care bundle
- S – Surface
- S – Skin inspection
- K – Keep moving
- I – Incontinence
- N - Nutrition

Identification, grading of pressure ulcers
- Use national grading tool
- Utilise local tissue viability nursing expertise
- Initiate and maintain correct and suitable treatment

Education
- Staff education – using workbooks, How-To guides, and patient stories
- Patient and family education – information on pressure ulcer risk and how to minimise whilst in hospital / at home

How to construct

1. Clarify your SMART aim statement.

2. Identify change concepts and ideas

3. Group and organize ideas under themes or primary drivers (concepts).

4. Draw, review, and revise regularly.

Change ideas - sources

- Evidence

- Experience: patients, families, staff

- Current process, situation

- Change concepts

- Creativity

- Demonstrated improvement elsewhere

- ….

Learning Exercise
Part 1

10 minutes:

- Put your aim on the worksheet (brief paraphrase is OK)

- Using small sticky notes, brainstorm all the change ideas (remember sources – identify where there *is evidence*)

Change idea

this is where you put your words - BIG

Change the way this

this is where you put your words - BIG

like any brainstorm - avoid discussion

new item - brainstorm, keep them coming

this is where you put your words - BIG

no one-word items - give them meaning

another item to add - four to seven words

no one-word items - give them meaning

stop when the team stalls out (can always add)

new item - brainstorm, keep them coming

another item to add - four to seven words

no one-word items - give them meaning

build on items, add anything, even "similar"

can start with round, everyone adds one note

build on items, add anything, even "similar"

can start with round, everyone adds one note

another item to add - four to seven words

post on the wall or flipchart for all to see

new item - brainstorm, keep them coming

post on the wall or flipchart for all to see

stop when the team stalls out (can always add)

can start with round, everyone adds one note

build on items, add anything, even "similar"

post on the wall or flipchart for all to see

stop when the team stalls out (can always add)

Learning Exercise
Part 2

10 minutes:

Use the worksheet to organize your ideas into:

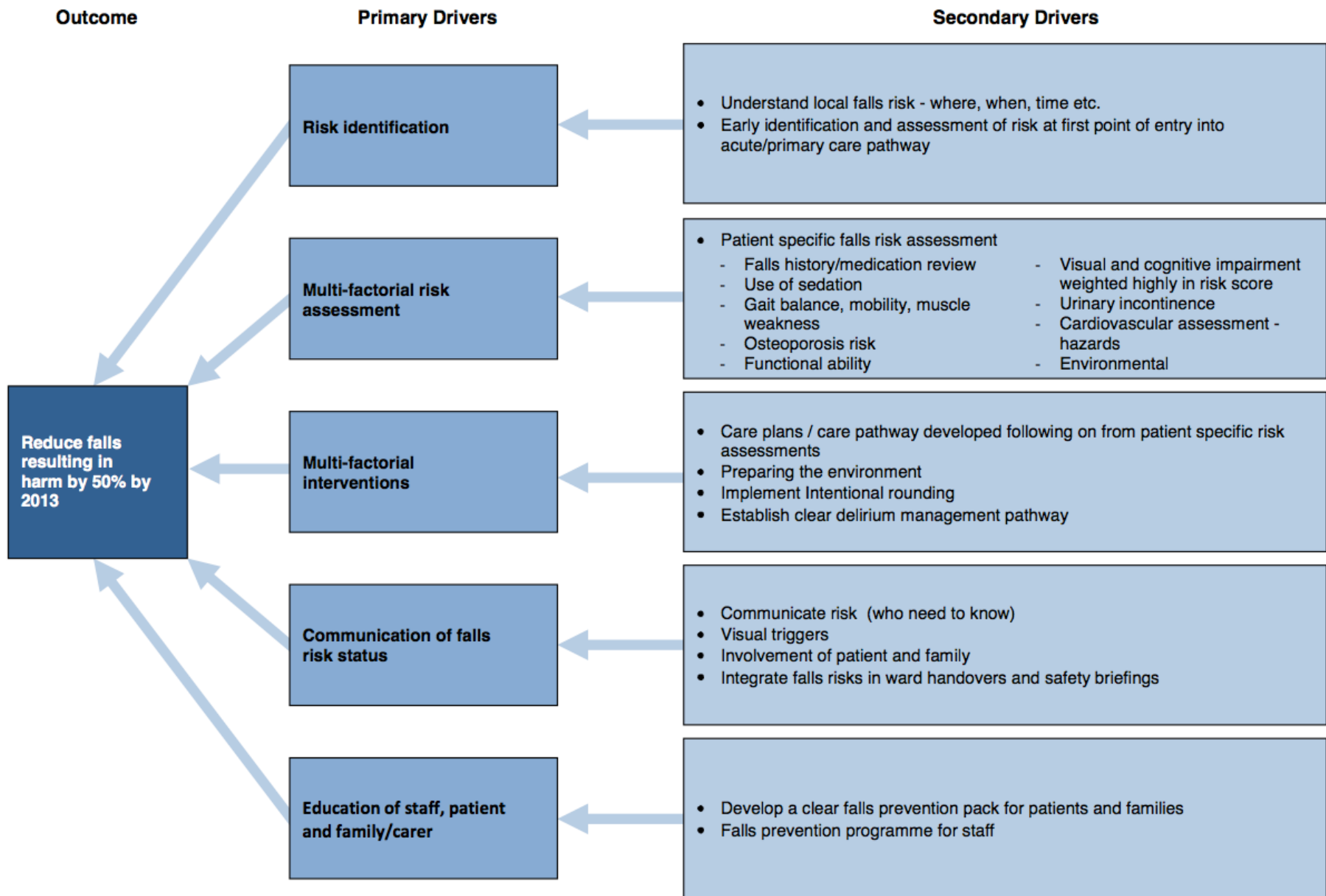Primary Drivers: Theme or concepts (ask How to get specific ideas)

Secondary Drivers: Specific ideas (ask Why to link to primary)

Add more, refine and begin to draw out.

Aim, outcome measures	Primary, Themes, Concepts, process measures	Secondary, specific change ideas, application of concepts	Assignment; Tests of change, Plan-Do-Study-Act cycles

HOW ->

HOW ->

build on items, add anything, even "similar"

?

Change idea

post on the wall or flipchart for all to see

new item - brainstorm, keep them coming

...here you ...words - ...G

no one-word items - give mea...

another item add - four to ...words

this is where you put your words - BIG

can start with round, everyone adds one note

another item to add - four to seven words

new item - brainstorm, keep them coming

stop when the team stalls out (can always add)

post on the wall or flipchart for all to see

<- WHY

<- WHY

Outcome	Primary Drivers	Secondary Drivers

Reduce falls resulting in harm by 50% by 2013

Risk identification
- Understand local falls risk - where, when, time etc.
- Early identification and assessment of risk at first point of entry into acute/primary care pathway

Multi-factorial risk assessment
- Patient specific falls risk assessment
  - Falls history/medication review
  - Use of sedation
  - Gait balance, mobility, muscle weakness
  - Osteoporosis risk
  - Functional ability
  - Visual and cognitive impairment weighted highly in risk score
  - Urinary incontinence
  - Cardiovascular assessment - hazards
  - Environmental

Multi-factorial interventions
- Care plans / care pathway developed following on from patient specific risk assessments
- Preparing the environment
- Implement Intentional rounding
- Establish clear delirium management pathway

Communication of falls risk status
- Communicate risk (who need to know)
- Visual triggers
- Involvement of patient and family
- Integrate falls risks in ward handovers and safety briefings

Education of staff, patient and family/carer
- Develop a clear falls prevention pack for patients and families
- Falls prevention programme for staff

NHS South England accessed online:
harmfreecare.org

- Care plans / care pathway developed following on from patient specific risk assessments
- Preparing the environment
- Implement Intentional rounding
- Establish clear delirium management pathway

- Consider frequency
- Modify checklist to appropriate situation
- Educate carer's in own environment
- Consider telephone checks
- Implement hourly intentional rounding for high risk patients in inpatient settings
- Use of specialling

Ideas to develop/test

Creativity

ALTERNATIVES

Alternatives require connections

Idea	"fixed point"	Alternative
rowboat	way to cross a river	bridge

Practice

"fixed point"

Idea   **Alternative**

Credit card

Glass

Fan

Fixed points are important and not random

"fixed point"

Idea		Alternative
Idea		**Alternative**
Dog	Pet	Hamster Bird Cat
Dog	Security	Alarm Neighbor Lighting

Concept are useful "fixed points"

- A concept is a <u>general</u> idea
- Ideas and concepts on a continuum
- Concepts are keys to more ideas (alternatives)

Ref.2

Change Concept

- A change concept is a <u>general</u> idea for change.
- Use change concepts to develop <u>specific process changes</u> in a local context.

Ref. 2

Using Change Concepts *to find more* Change Ideas

1. Concept Triangle
   – Using ideas to breed more

2. Using Provided Change Concepts

Stand instead of sit (20%)

Take stairs not elevator

More active
daily routine

Focus

Walk to work

Personal:
Weight Loss

Go for walk at lunch break

Wear a pedometer

More steps taken each day

Walk to work

Focus

Personal: Weight Loss

Keep a daily log of activity

Use app for mobile phone

Measure to increase activity

Wear a pedometer

Focus

Personal: Weight Loss
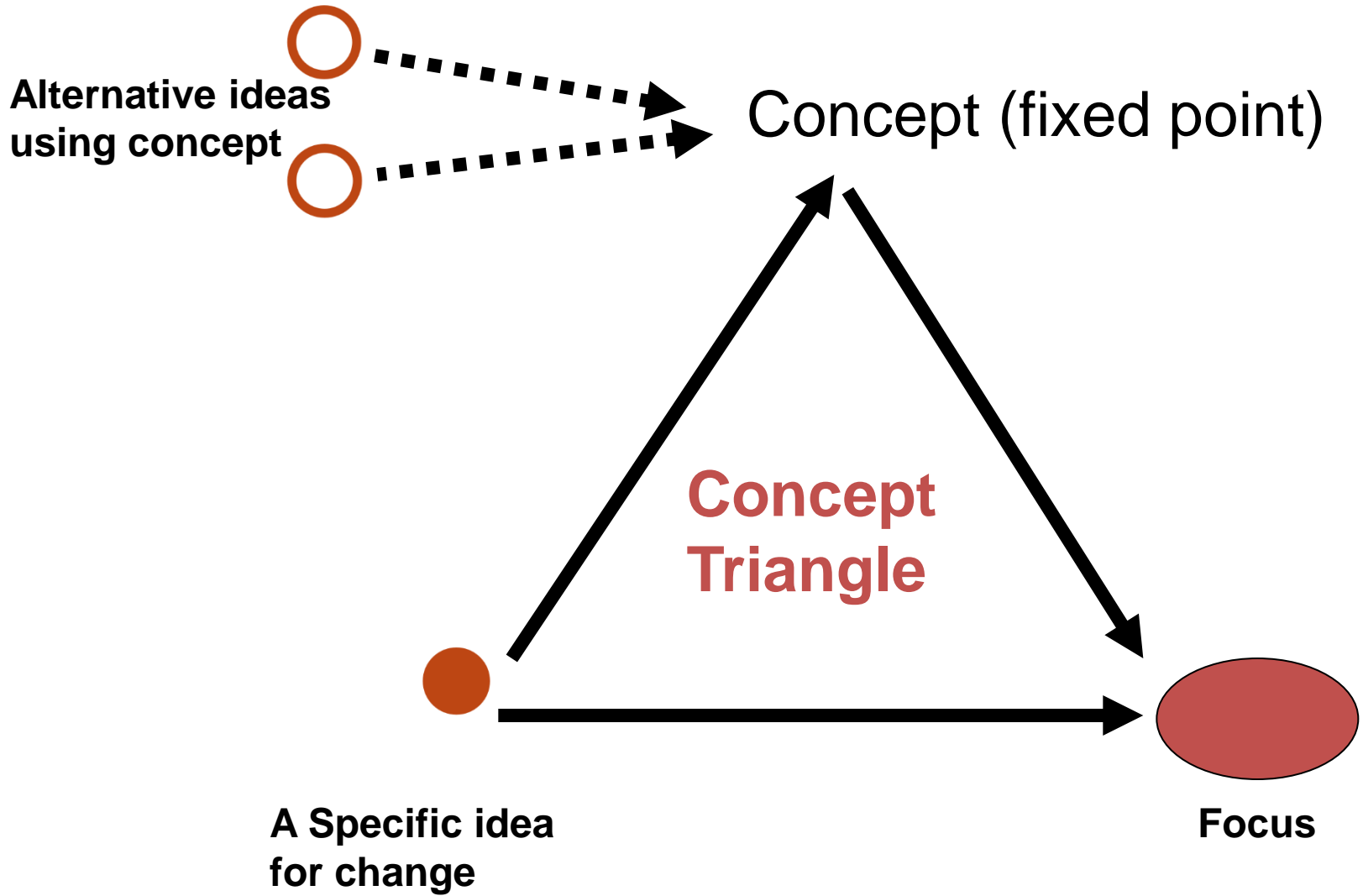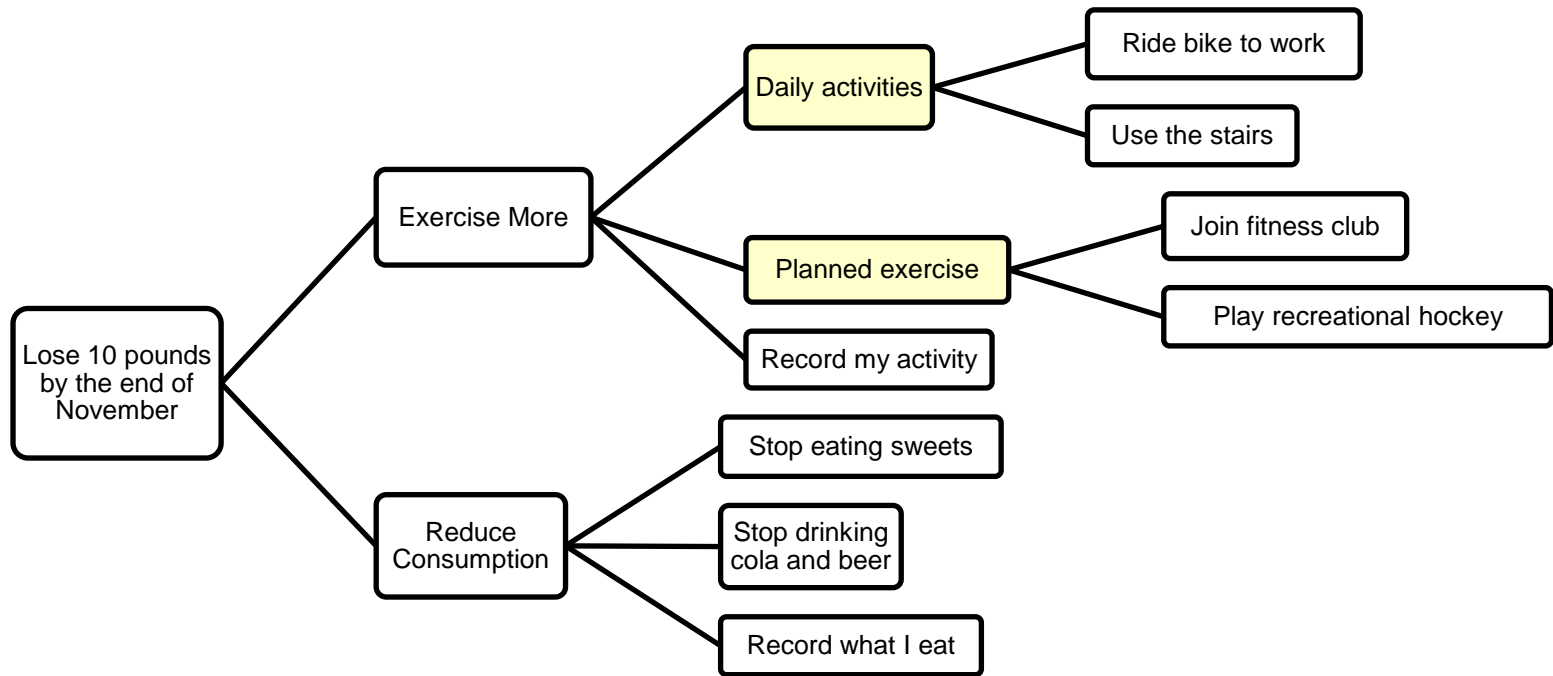
Alternative ideas using concept

Concept (fixed point)

Concept Triangle

A Specific idea for change

Focus

Ref.1
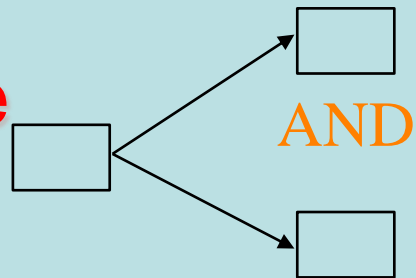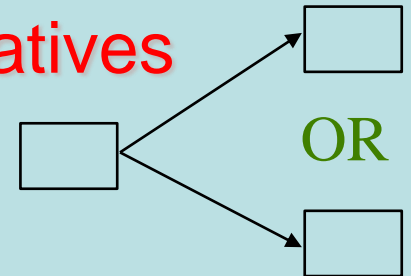
Alternatives ideas using concept:

More comprehensive
fall investigation

**Concept
Triangle**

Improve post
fall huddles

**Use a checksheet to
guide review factors**
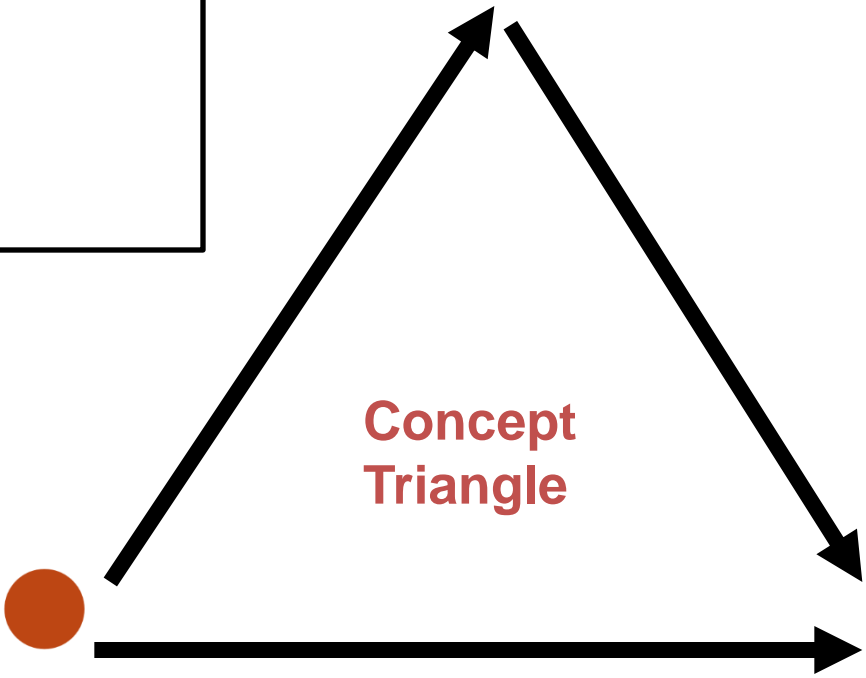
Alternatives ideas using concept:

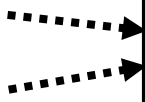**Everyone knows the method and expectation**

Concept Triangle

Provide a training session on huddles
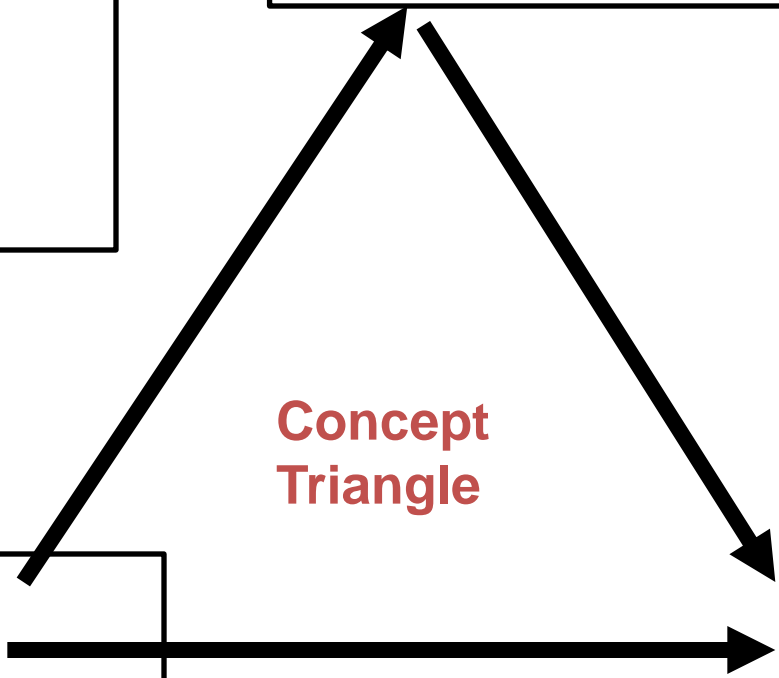
Improve post fall huddles

Alternatives ideas using concept:

a concept:

Concept Triangle

Your idea:

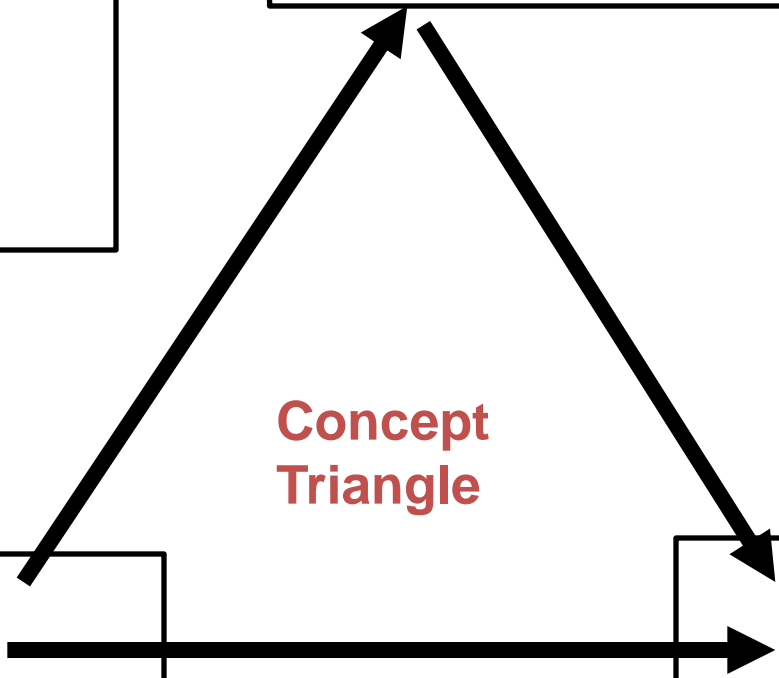**Improve post fall huddles**

Alternatives ideas using concept:

a concept:

Concept Triangle

Your idea:

Your focus:

Questions to help you to EXTRACT a concept.

Purpose Concepts
What are we trying to do?
What is the purpose of the action or operation?

Mechanism Concepts
How does it work?
How is the purpose achieved?
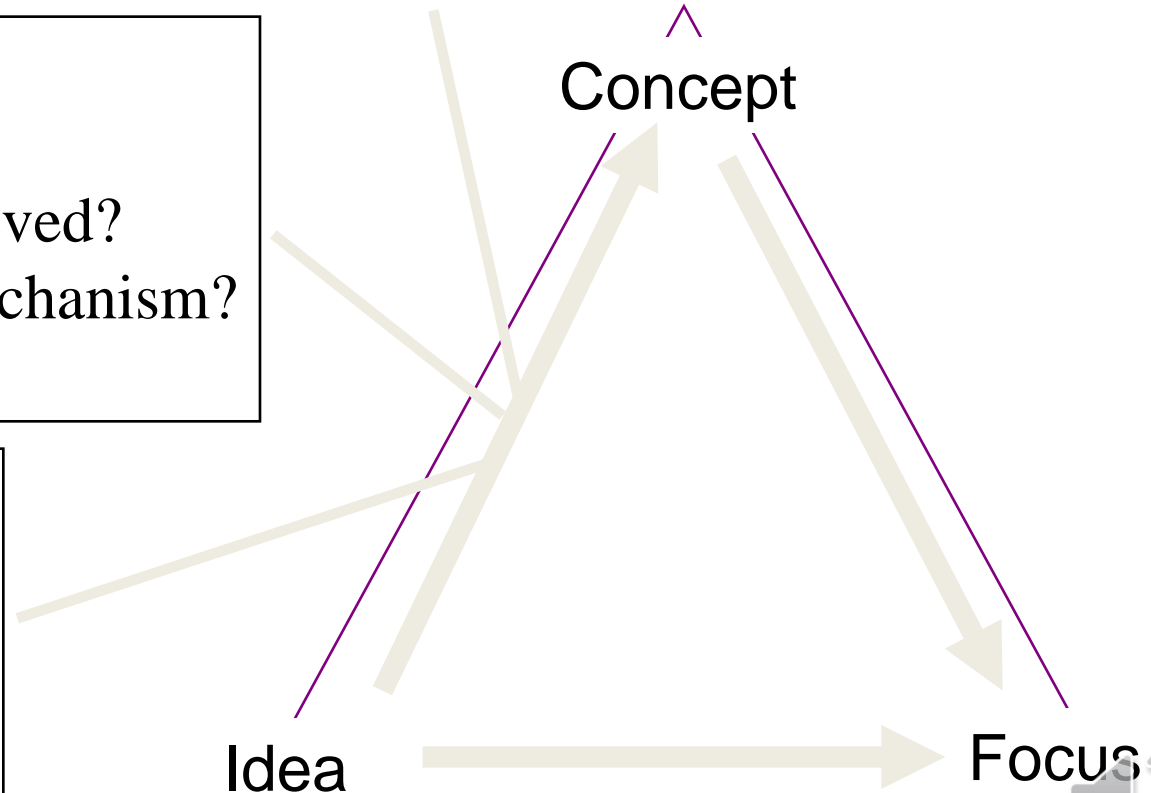What is the operating mechanism?
What is happening?

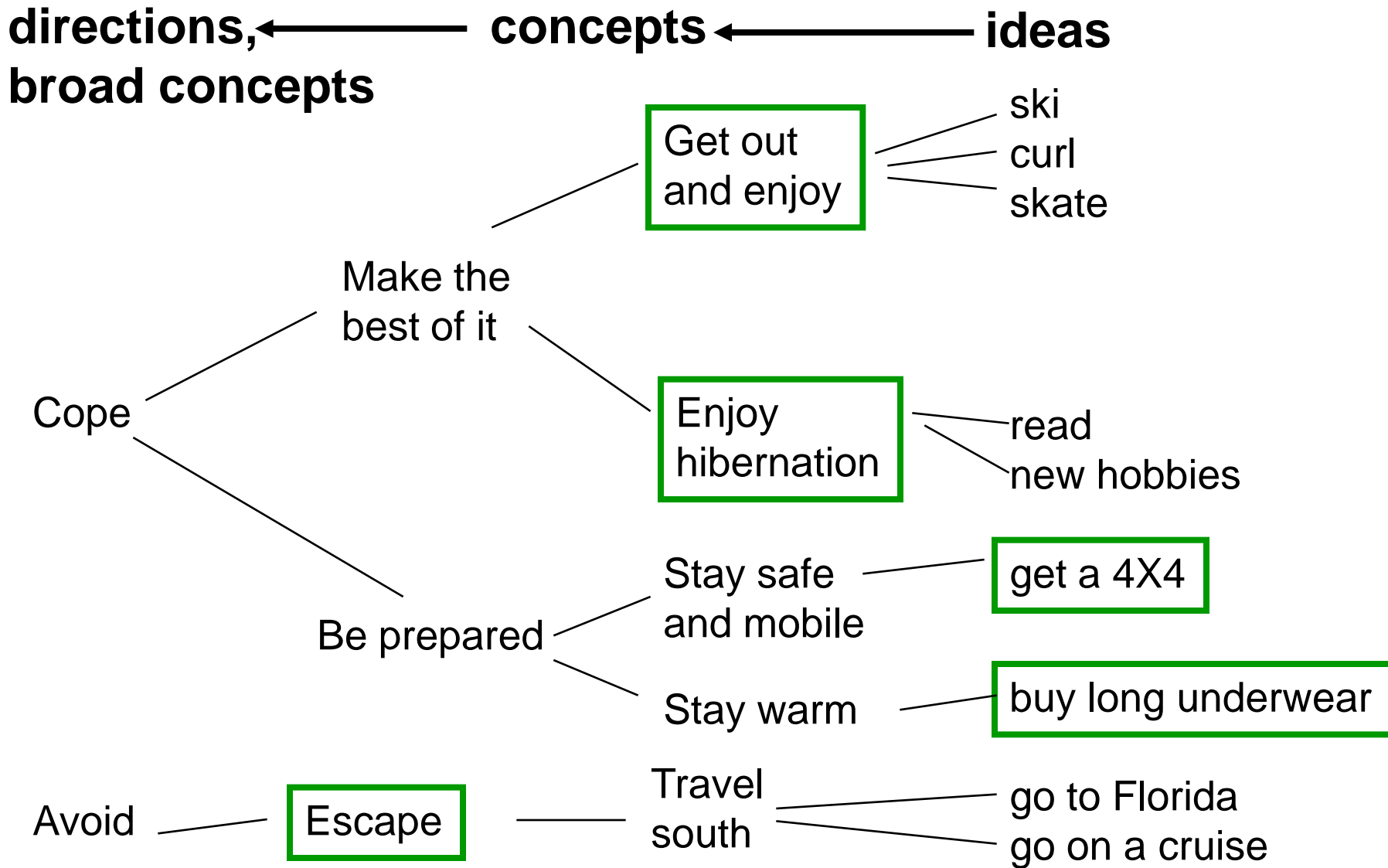Value Concepts
Why is it useful?
What does it provide?
Where is its value?
Why is this worthwhile?

Concept

Idea

Focus

Ref.1

Better ways to cope with the Canadian Winter

directions, ◄────── concepts ◄────── ideas
broad concepts

Get out and enjoy
- ski
- curl
- skate

Make the best of it

Cope

Enjoy hibernation
- read
- new hobbies

Stay safe and mobile — **get a 4X4**

Be prepared

Stay warm — **buy long underwear**

Travel south
- go to Florida
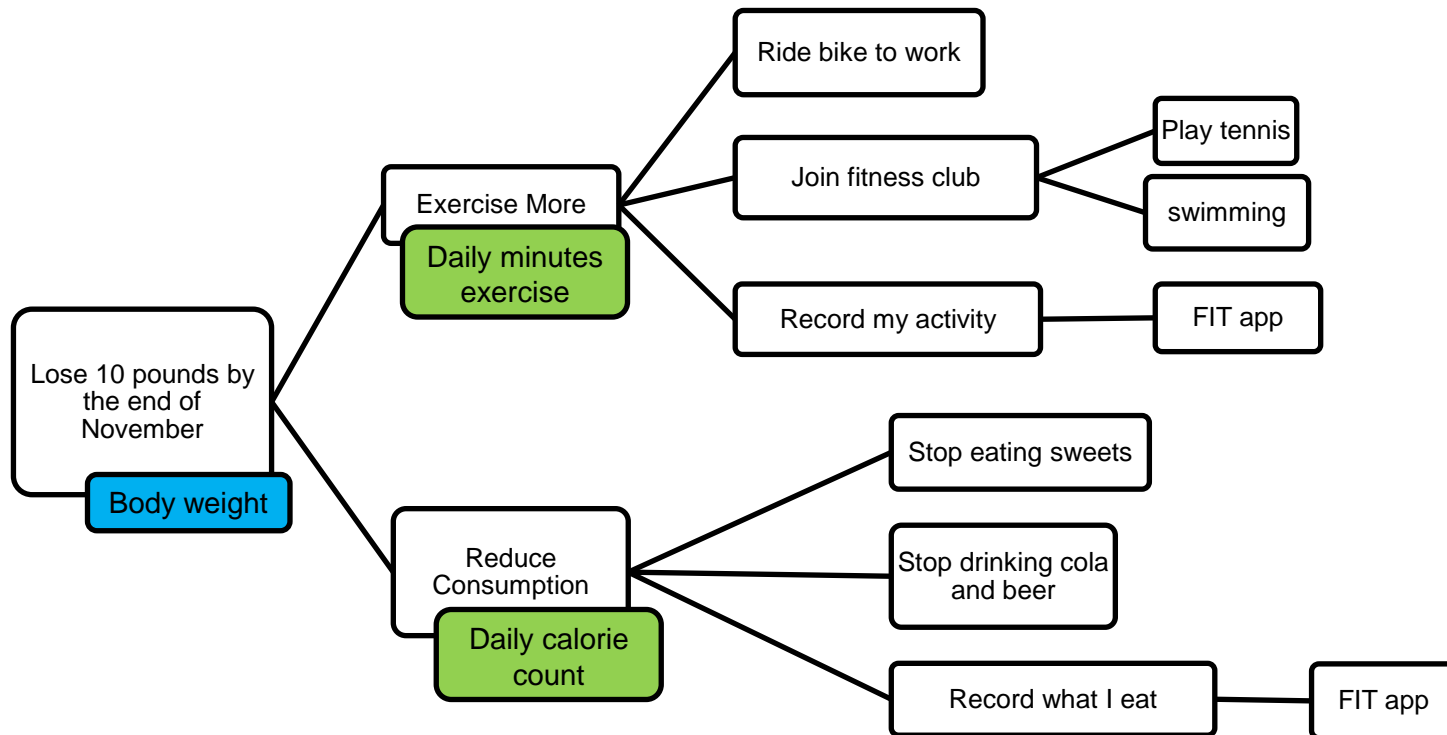- go on a cruise

Avoid — **Escape**

A 'remote' example to illustrate how to multiply ideas by identifying concepts behind the ideas and then asking 'what are the other ways we could achieve the concept?'

Concept Thinking

- Strengthen your Driver Diagram with better thinking

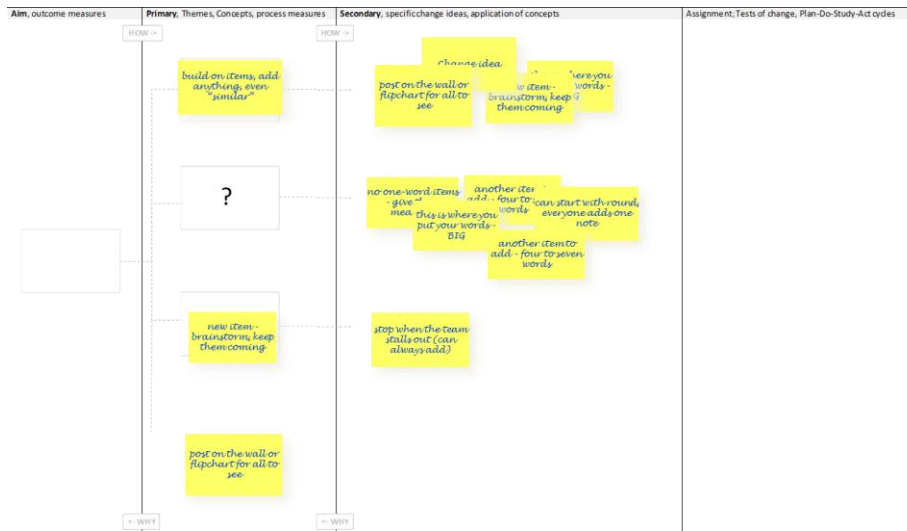- No leaps of faith, show the mechanism, purpose or value

Integrate Measurement

Learning Exercise
Part 3

Find three points to measure.

Identify points you may need alternatives.
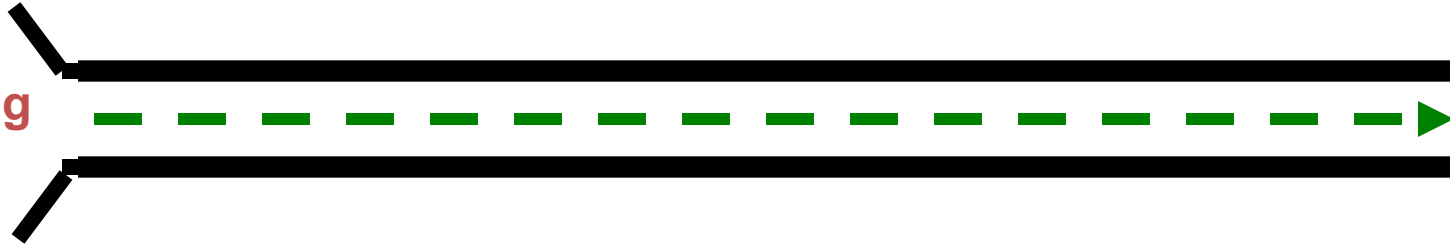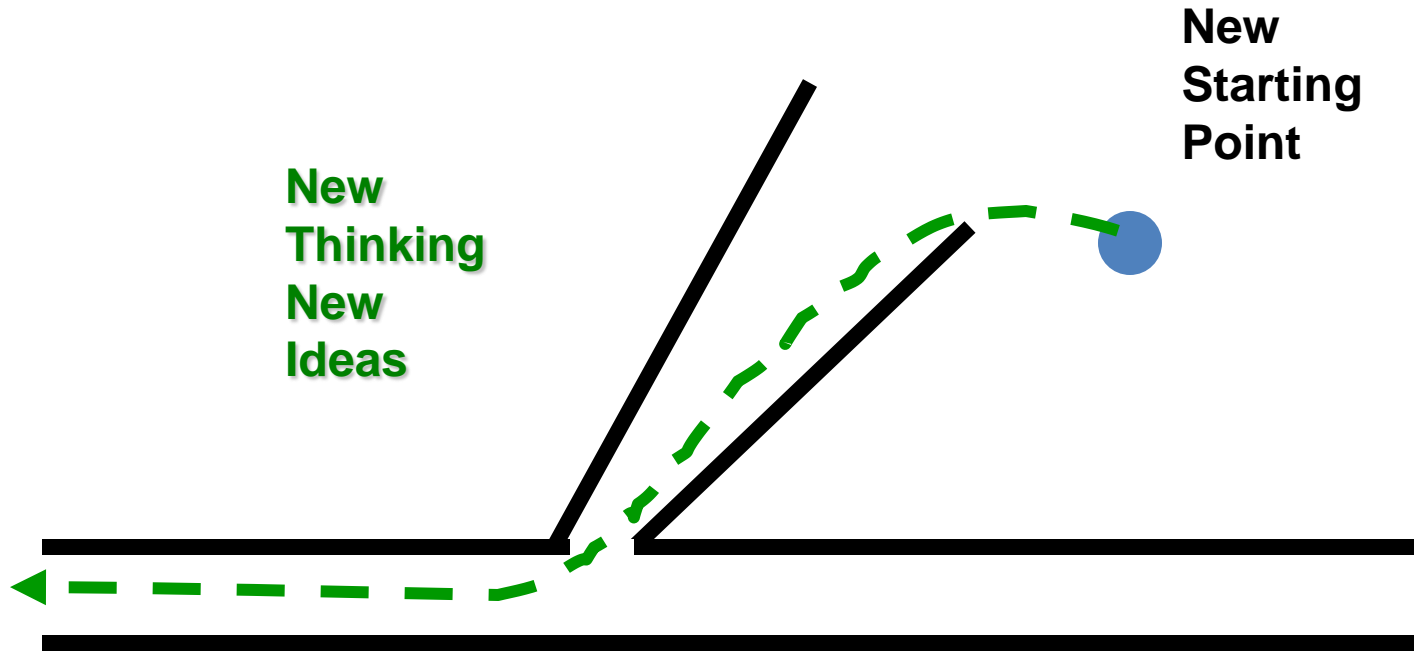
LATERAL THINKING

Random Entry

- Deliberate act to cut across established patterns
- Words hold many concepts and are a convenient way to get a new starting point
- Other 'random' stimuli can be used

Starting point

Same old ideas

New Starting Point

New Thinking New Ideas

Lateral Thinking
by Edward de Bono

thermostat

Focus:

Way finding in hospitals

Random Entry

Keeps temp constant → **device to signal turns**

on the wall → **lights on the wall like planes**

lighted signs to guide

can set easily → **map drawing system at entrance**

you start the 'path light' to guide you

change by time of day → **when clinic on, special guidance**

simple layout with convertible space

Random Word

coal

association
principle
function
mechanism
directions
combinations

Focus

Prevent kids
starting to smoke

underground

mine

black lung disease

limited resource

- Form an anti-smoking 'underground'
- Must smoke in underground rooms

- Make cigarettes hard to get
- Need a permit to buy
- Mine the ideas of kids

- Must study diseases before getting permit
- Begin paying 'smoker's compensation'

- Ration the permits
- Progressively impose limits on growing and importing

Ideas

Random Word
(from the word list)

What comes to mind
when you think
of this word?

Focus

What do you need
new ideas on?

**New ideas to
prevent
missed
appointments**

Random Word

(from the word list)

Ideas

What comes to mind
when you think
of this word?

Focus

What do you need
new ideas on?

CribNotes and random word list (12 x 60) provided

POSSIBLE NEXT STEPS

Apply Now

Final Advanced Learning Program of 2014/15 begins in January.

Application deadline: November 14, 2014

www.ideasontario.ca

References

1. de Bono, Edward, *Serious Creativity*. Harper Perennial: Toronto, 1992.

2. Langley, Gerald J., Kevin M. Nolan, Thomas W. Nolan, Clifford L. Norman and Lloyd P. Provost, *The Improvement Guide*. Jossey-Bass: San Francisco, 1996.

3. Patterson, K. et al. (2007) *Influencer: The power to change anything*. Mc-Graw Hill.