Liberating Structures:
A Novel Approach to IPAC Challenges

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Disclosures

• No conflicts of interest
Learning Objectives

• To learn about Liberating Structures (LS) as a way of engaging team members and stakeholders in productive, purposeful, inclusive ways
  – Theoretical basis and supporting evidence
• To experience LS first hand and learn how they can be used in your daily work
Impromptu Networking
Rapidly Share Challenges and Expectations, Build New Connections
Impromptu Networking

Rapidly Share Challenges and Expectations, Build New Connections

• Find 1 new person and introduce yourself
• 2 questions, 2 minutes each to discuss
• 3 cycles each with a new partner
• Introduce yourself to your partner.
• What is one big **challenge** you (or your IPAC team) are facing right now?
• What do you hope **to give** and **to get** from participating in this session today?

Find a partner and share. Then find another partner. And another!
What did you notice?

What was structured? What was liberated?
THEORY AND SUPPORTING EVIDENCE
Organizational Behaviour

Traditional View

Complex Adaptive System
Organizational Culture: Definition

“A pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.”
Organizational Culture: Definition

“A pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.”

“The way we do things around here and why we do them”
Organizational culture eats strategy for breakfast, lunch and dinner
Components of Organizational Culture

Artifacts

Espoused values

Assumptions

Existing culture

*Qual Saf Health Care* 2004;13:ii16-ii21 (Modified)
Culture Change

Qual Saf Health Care 2004;13:ii16-ii21
THE POWER OF POSITIVE DEVIANECE
HOW UNLIKELY INNOVATORS SOLVE THE WORLD’S TOUGHEST PROBLEMS
HARVARD BUSINESS PRESS
Theory of Positive Deviance

• “[I]n most settings a few at risk individuals follow uncommon, beneficial practices and consequently experience better outcomes than their neighbours who share similar risks”

• The positive deviance (PD) process discovers these “positive deviants” and facilitates the spread of their practices throughout the population

*Brit Med J 2004;329:1177-9*
The Story of PD
Changing Relationships, Changing Culture

Before PD

After PD

J Nursing Admin 2010;40:150-3
Front-Line Ownership: Generating a Cure Mindset for Patient Safety

INVITED ESSAY

Brenda Zimmerman, PhD
Schulich School of Business, York University

Paige Reason, MPH
Infection Prevention and Control Unit, University Health Network
Formerly of Public Health Ontario

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Michael Gardam, MD
Infection Prevention and Control Unit, University Health
Formerly of Public Health Ontario
Faculty of Medicine, University of Toronto

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Front-Line Ownership

Positive Deviance
+ Complexity Science
  Context and social proof
  Need for increased interconnectivity
+ Engagement Tools
  Liberating structures
=
Front-line Ownership

“It is easier to act your way into a new way of thinking than to think your way into a new way of acting.”
Canadian FLO Study

• 5 hospitals in BC and Ontario participated over 18 months
• IPAC interventions unique to each site were developed and implemented by front-line staff
• Outcomes
  – Infection rates on FLO units decreased by half
  – All units except 2 decreased compared to their respective hospital rates
  – No meaningful change in process measures except the one hospital that measured hand hygiene compliance increased by 30%
  – Increase in interconnectivity at all sites

*Healthcare Papers 2013;13(1):6-22*
BC Children’s & Women’s Hand Hygiene Study

Patients/Visitors

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Standard</th>
<th>FLO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Int</td>
<td>5.00%</td>
<td>10.00%</td>
<td>15.00%</td>
</tr>
<tr>
<td>Post Int</td>
<td>10.00%</td>
<td>20.00%</td>
<td>25.00%</td>
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</table>

HCWs

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<tr>
<th></th>
<th>Overall</th>
<th>Standard</th>
<th>FLO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Int</td>
<td>70.00%</td>
<td>60.00%</td>
<td>50.00%</td>
</tr>
<tr>
<td>Post Int</td>
<td>80.00%</td>
<td>70.00%</td>
<td>60.00%</td>
</tr>
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</table>

Am J Infect Control 2019; in press.
Veterans Affairs Initiative to Prevent Methicillin-Resistant Staphylococcus aureus Infections

Rajiv Jain, M.D., Stephen M. Kralovic, M.D., M.P.H., Martin E. Evans, M.D., Meredith Ambrose, M.H.A., Loretta A. Simbartl, M.S., D. Scott Obrosky, M.S., Marta L. Render, M.D., Ron W. Freyberg, M.S., John A. Jernigan, M.D., Robert R. Muder, M.D., LaToya J. Miller, M.P.H., and Gary A. Roselle, M.D.
METHODS

A "MRSA bundle" was implemented in 2007 in acute care VA hospitals nationwide in an effort to decrease health care–associated infections with MRSA. The bundle consisted of universal nasal surveillance for MRSA, contact precautions for patients colonized or infected with MRSA, hand hygiene, and a change in the institutional culture whereby infection control would become the responsibility of everyone who had contact with patients. Each month, personnel at each facility entered into a central database aggregate data on adherence to surveillance practice, the prevalence of MRSA colonization or infection, and health care–associated transmissions of and infections with MRSA. We assessed the effect of the MRSA bundle on health care–associated MRSA infections.
Figure 3. Nationwide Rates of Health Care–Associated Infections with Methicillin-Resistant Staphylococcus aureus (MRSA) in Veterans Affairs (VA) Facilities.

Between October 2007, when the MRSA bundle was fully implemented, and the end of June 2010, the rates of health care–associated MRSA infections declined by 62% in intensive care units (ICUs) and by 45% in non-ICUs. There was no significant change in the rates of health care–associated MRSA infections in the ICUs for the 2-year period (October 2005 through September 2007) before full implementation of the MRSA bundle; data for that 2-year period were not available for non-ICUs. The shaded area represents the transition period when the VA MRSA Prevention Initiative was being introduced. The analysis of trends was performed with the use of Poisson regression.
Positive Deviance: A New Strategy for Improving Hand Hygiene Compliance

Alexandre R. Marra, MD; Luciana Reis Guastelli, RN; Carla Manuela Pereira de Araújo, RN;
Jorge L. Saraiva dos Santos, RN; Luiz Carlos R. Lambiet, RN; Moacyr Silva Jr, MD; Giselle de Lima, PharmD;
Ruy Guilherme Rodrigues Cal, MD; Angela Tavares Paes, PhD; Miguel Cendoroglo Neto, MD;
Luciana Barbosa, PharmD; Michael B. Edmond, MD, MPH, MPA; Oscar Fernando Pavão dos Santos, MD

Positive deviance: A program for sustained improvement in hand hygiene compliance

Alexandre R. Marra, MD,§ Luciana Reis Guastelli, RN,§ Carla Manuela Pereira de Araújo, RN,§
Jorge L. Saraiva dos Santos, RN,§ Miguel Almeida O. Filho, RN,§ Claudia Vallone Silva, RN,§ Julia Yaeke Kawagoe, RN,§
Miguel Cendoroglo Neto, MD,§ Oscar Fernando Pavão dos Santos, MD,§ and Michael B. Edmond, MD, MPH, MPA,§
§ São Paulo, Brazil, and Richmond, Virginia

Major article
A multicenter study using positive deviance for improving hand hygiene compliance
Alexandre R. Marra MD,§,§§, Danilo Teixeira Noritomi MD,§§, Adilson J. Westheimer Cavalcante MD,§§,
Thiago Zinis Sampaio Camargo MD,§§, Renata Puzzo Bortoleto MD,§§,
Marcelino Souza Durao Junior MD,§§,§§§, Anaucha Apisarnthanarak MD,§§, Claudia Laselva MD,§§,
Walace de Souza Pimentel MD,§§,§§§, Leonardo Jose Rolim Ferraz MD,§§,§§§,
Maria Fátima dos Santos Cardoso RN,§§, Elivane da Silva Victor PhD,§§,
Oscar Fernando Pavão dos Santos MD,§§,§§§, Miguel Cendoroglo Neto MD,§§,§§§,
Michael B. Edmond MD, MPH, MPA,§§, and the Positive Deviance For Hand Hygiene Study Group
What methods are used to apply positive deviance within healthcare organisations? A systematic review

Ruth Baxter, Natalie Taylor, Ian Kellar, Rebecca Lawton

Table 2: Key characteristics of positive deviance applications within healthcare organisations.

Table 2 Continued

Table 2: Continued

BMJ Qual Saf 2016;25:190-201
HOW TO USE LIBERATING STRUCTURES
Conventional Structures can be… Too Tight or Too Loose

Presentation
• Over-controlled
• Little active engagement & meaning making

Open Discussion
• Under-controlled
• Activity is random, unpredictable, may not lead to productive end points
Liberating Structures …

• Have roots in…
  – Positive Deviance
  – Complexity Theory
  – Open Movement

• Meant to be…
  – “Serious Fun”
  – Flexible
  – Purpose-full

www.liberatingstructures.com
Principles of Liberating Structures

• Include and unleash everyone
• Practice deep respect for people and local solutions
• Build trust as you go
• Learn by failing forward
• Practice self-discovery within a group
• Amplify freedom and responsibility
• Emphasize possibilities: believe before you see
• Invite creative destruction to enable innovation
• Engage in seriously playful curiosity
1. Compile a list of **to-do’s** in answer to this question:

   How can we ensure that every patient/client in our health care setting acquires MRSA?

   • Go wild!

2. TRIZ

   Stop counterproductive activities & behaviours to make space for innovation
1. Compile a list of to-do’s in answer to:

   *How can we ensure…*

   • Go wild!

2. Go down your list and ask:

   **Is there anything we are doing that resembles - in any shape or form - the things on our list?**

   Be unforgiving!
1. Compile a list of to-do’s in answer to:
   - How can I/we ensure…
   - Go wild!

2. Go down your list and ask:
   Is there anything we are doing that resembles in any shape or form to-do’s on our list?

3. Compile the list of what needs to be stopped.
   - Take one item at a time & ask:
     How am I and how are we going to STOP it? What is your first move?
   - Be as concrete as you can
   - Select one idea and prepare to share with the larger group.

TRIZ Steps
Stop counterproductive activities & behaviours to make space for innovation
1. How do you know or recognize when patients, families, and visitors are not cleaning their hands?
2. How do YOU contribute effectively to solving the problem?
3. What prevents you from doing this or taking these actions all the time?
4. Is there anyone you know who is able to frequently? How?
5. Do you have any ideas?
6. What needs to be done to make it happen? Any volunteers?
7. Who else needs to be involved?

Lipmanowicz & McCandless, 2010
Facilitating DADs

- Do not answer questions that have not been asked directly to you; give questions back to the group
- Wait at least 20 seconds for a reply
- Encourage all people to talk
- Do not respond positively or negatively to suggestions – let the group decide
- Allow the dialogue to be non-linear
- Remember that the group has solutions, not you

Lipmanowicz & McCandless, 2010
Reflect on the outbreak we have just experienced...

• **WHAT?**
  • What facts, data, & observations stand out about this outbreak?

• **SO WHAT?**
  • How do you explain those facts? Assumptions? Patterns and themes? What is important?

• **NOW WHAT?**
  • What action may help you move forward? What impact do you expect on teaching and learning? What will you do next with this?
1-2-4-All

Engage Everyone Simultaneously in Generating Questions, Ideas, and Suggestions

Invitation:
What opportunities do you see for using LS to disrupt conventional structures in your context?

1-2-4-All in motion. Multiple short cycles are more productive than one longer session.
What opportunities do you see for using LS to disrupt conventional structures in your context?

- 1 minute alone
- 2 minutes in pairs
- 4 minutes as a group
- All – hear from everyone
What did you notice?
What was structured? What was liberated?
15% Solution
Discover and focus on what each person has the freedom and resources to do now

- “What do you have discretion and freedom to do without more resources or authority?”
- 1 - individually generate a list. (5 min)
- 2 - share your 15% with a partner or small group. 1 -2 min. per person
- 4 - one person at a time (5 min)
- (If time allows group members can offer advice)
<table>
<thead>
<tr>
<th>LS Menu</th>
<th>Wicked questions</th>
<th>What's debrief</th>
<th>Min specs</th>
<th>Heard, seen respected</th>
<th>What I need from you</th>
<th>Integrated autonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design elements</td>
<td>Appreciative interviews</td>
<td>Discovery and action dialog</td>
<td>Improv prototyping</td>
<td>Drawing together</td>
<td>Open space</td>
<td>Critical uncertainties</td>
</tr>
<tr>
<td>1-2-4-All</td>
<td>TRIZ</td>
<td>Shift &amp; share</td>
<td>Helping heuristics</td>
<td>Design storyboards</td>
<td>Generative relationships</td>
<td>Ecocycle</td>
</tr>
<tr>
<td>Impromptu networking</td>
<td>15% solutions</td>
<td>25 : 10 crowdsourcing</td>
<td>Conversation café</td>
<td>Celebrity interview</td>
<td>Agree/certainty matrix</td>
<td>Panarchy</td>
</tr>
<tr>
<td>9-whys</td>
<td>Troika consulting</td>
<td>Wise crowds</td>
<td>User experience fishbowl</td>
<td>Social network webbing</td>
<td>Simple ethnography</td>
<td>Purpose to practice</td>
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Learning Objectives

• To learn about Liberating Structures (LS) as a way of engaging team members and stakeholders in productive, purposeful, inclusive ways
  – Theoretical basis and supporting evidence
• To experience LS first hand and learn how they can be used in your daily work
Key Messages

• Culture eats strategy for breakfast
• FLO offers a promising new approach to IPAC challenges
• Liberating structures are an inexpensive and effective way to engage front-line staff and improve patient outcomes
Reach out to LS users: Field stories and challenges are being shared in real-time on the LinkedIn group and Facebook group. There are 24+ public LS user groups across North America, London and Paris. For more information go to liberatingstructures.com
Resources

https://vancouverliberatingstructuresusergroup.wordpress.com/

Twitter: @VancouverLSUG
Facebook: VLSUG FB Page

LinkedIn Group
Slack Group (Seattle leaders)
LS App (Google Play or Apple Store)
Some slides courtesy of Barish Golland and Leva Lee of the Vancouver Liberating Structures Users Group (vancouverliberatingstructuresusergroup.wordpress.com/)
QUESTIONS

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