

Fragile Infant Forums for Implementation of IFCDC Standards: Systems Thinking and Implementation

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“A recent meeting of the Gravens Consensus Panel for Infant and Family-Centered Developmental Care (IFCDC) allowed for an in-depth application of principles of change, quality improvement, and working models in which these approaches can be used.”

Recent emphasis on systems thinking in a Fragile infant Forum for implementation of Standards

A recent meeting of the Gravens Consensus Panel for Infant and Family-Centered Developmental Care (IFCDC) allowed for an in-depth application of principles of change, quality improvement, and working models in which these approaches can be used. The following summary highlights the content and discussion of the panel's work and is intended to lay a foundation for future application and implementation of the IFCDC evidence-based standards.

What is systems thinking, and what does it have to do with Infant and Family-Centered Developmental Care (IFCDC) im-

plementation? (1)

All of us work in systems when we provide IFCDC. The “system” may refer to the unit or the entire hospital. To understand the connection and relationships among the parts of a system, an organization/unit consideration of the entire ecosystem must be considered. Below is an example of the parts of the “system” that must be considered as IFCDC moves to implementation.

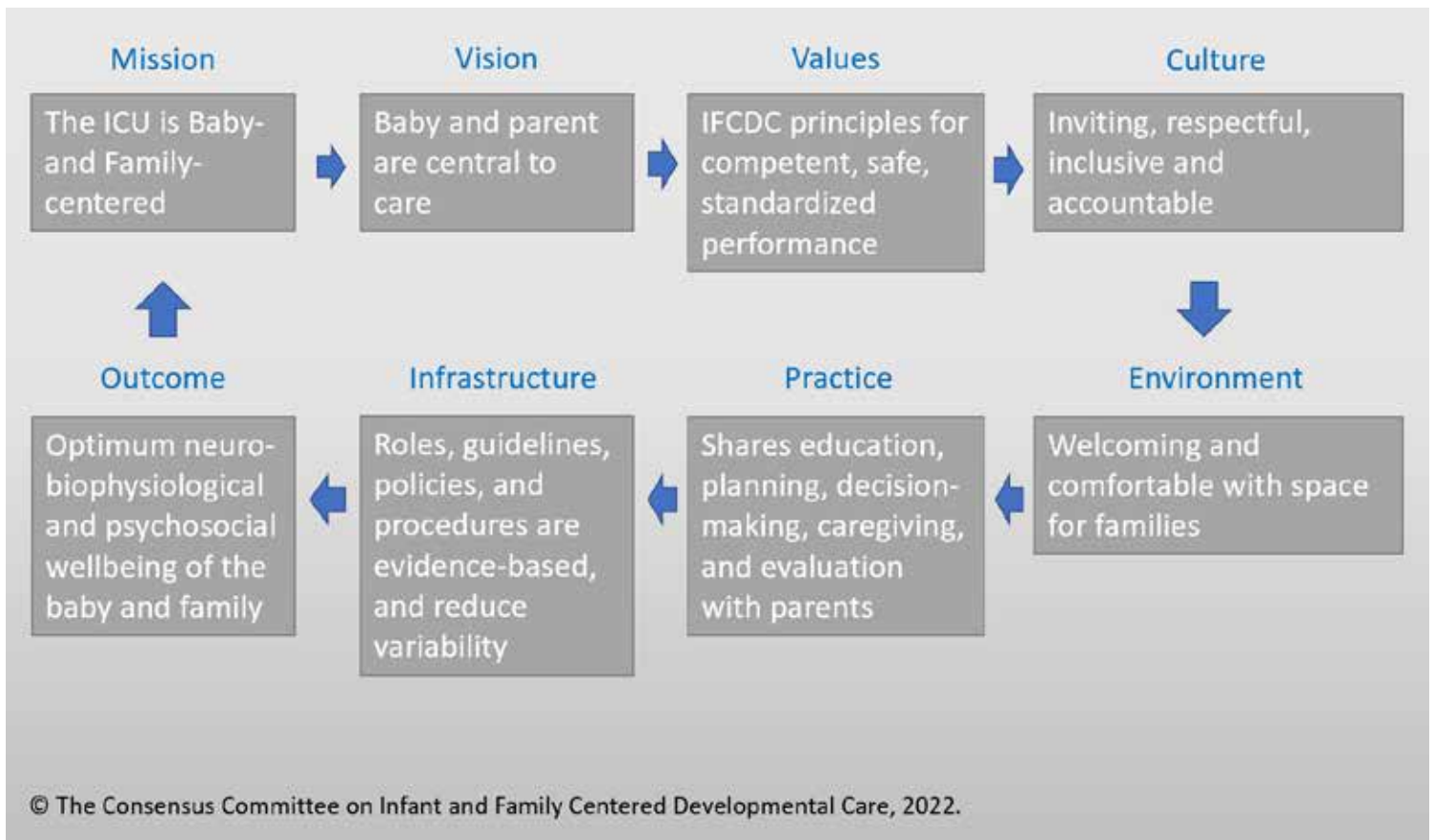
“To implement and adopt IFCDC, the unit culture must shift its thinking and how they deliver care—in most units, it is a major change. Change is constant, emotion-laden, and inevitable. Managing change helps decrease the chaos that can ensue if positive, consistent, and process-oriented leadership is absent.”

Implementing change in intensive care

To implement and adopt IFCDC, the unit culture must shift its thinking and how they deliver care—in most units, it is a major change. Change is constant, emotion-laden, and inevitable. Managing change helps decrease the chaos that can ensue if positive, consistent, and process-oriented leadership is absent. Application of a Theory of Change—whether it is Kubler-Ross (2); Lewin (3), or Rogers (4), the key is to recognize that people within an organization will react differently to change. Rogers (4) refers to the four categories of people according to their characteristics: Innovators and early adopters (readily recognize the need for change), Early Majority (need to think through the change), Late Majority (rule-followers, question the need to change), and Laggards or Resisters (feel threatened, need active persuasion to change). Informal system leaders may represent the characteristics of any of the categories of people. As a leader, you must engage all these types of people in the change, or your implementation will be doomed.

Various models and approaches to planning and facilitating change

Leaders may find it helpful to initially develop a roadmap of the process – to get a “big-picture” (5,6) perspective of the needs, direction, timeframe, and significant impact the change can make on the system. The Logic Model (7) is a tool to guide your thinking through the steps of change. Step 1 – what is your goal? What are you trying to accomplish? Step 2 – what are the inputs? What are you investing? Step 3 – what are the outputs? To whom do we reach? What do we do? What will we create? Step 4 – what are the outcomes? - short-term changes to learning and knowledge acquisition, midterm changes to behavior, practice, and decision-



making, and long-term results affecting social, economic, civic, and/or environmental change. Finally, what is your goal's significant impact or major accomplishment?

Systems thinking goes together with continuous quality improvement – “how are we doing?”, “can we do it better?”. The tools that can be used depending on the organization’s needs include P-D-S-A (Plan Do Study Act) (8) and key Drivers (9). Plan for measurable minor changes, then do something, study the implications, and act (PDSA). Ask in the process what are your influencers-the key drivers to make this change. The diagram below highlights some suggested key drivers.

“Changes must be prioritized, so take your big ideas and get feedback from all your stakeholders. Build continuous feedback to identify how the change is progressing again, considering the characteristics of your population innovators to laggards (3).”

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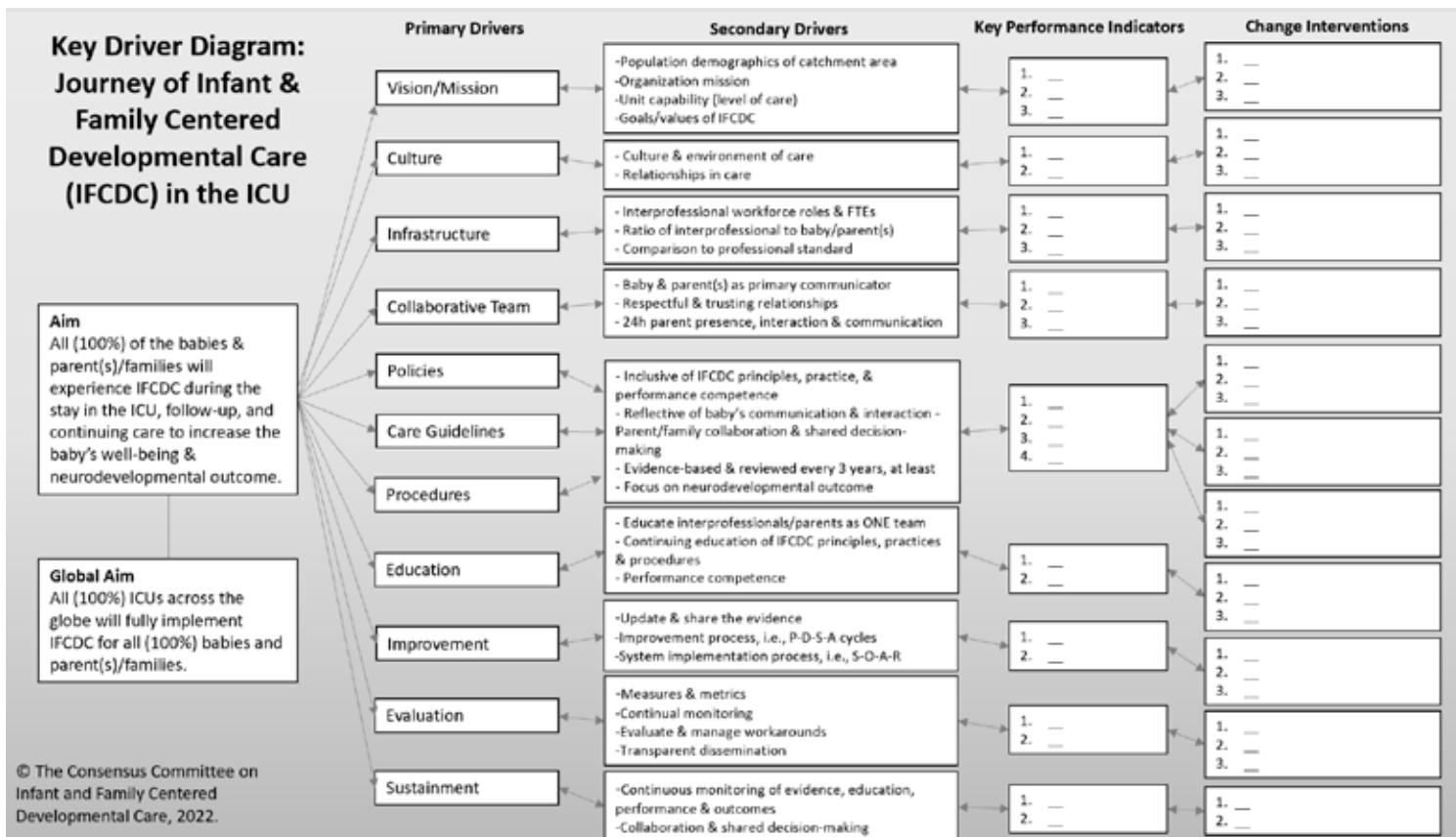
Identify measurable targets of the system and continuously moni-

tor those targets. Measures may include quantifiable and quantitative metrics of the system (unit) and population demographics, infrastructure, staff and family performance competence, staff and parent satisfaction, perception of the system culture, and outcome before and after the change. Evidence-based tools/instruments used for measurement are available in the literature.

There are seven basic quality improvement tools:

1. Cause-and-effect diagram;
2. Check sheet;
3. Control chart;
4. Histogram;
5. Pareto chart;
6. Scatter diagram;
7. Stratification. (10)

The Fishbone Diagram examines the cause and effect of the reasons change occurs. (11) Remember that systems thinking in complex adaptive systems should be applied to all evidence-based practices that exemplify IFCDC. IFCDC Competence implementation uses a gap analysis to identify the challenges in implementing an IFCDC standard or competency and determine how easily the change will be implemented, its impact, its effort, and how it is prioritized. (12)



Go by a playbook for the implementation. The playbook puts it all together. It examines the collaborative team, the evidence to support the change, the gap/problem, potential cause and effect as illustrated by a Fishbone Diagram, the stages of change-key driver diagram; assessment/measurement tools; metrics obtained before and after the change with continuous monitoring with visual measures over time to note the change or effect. Communication with the team throughout the process and identification of the lessons learned are essential to successful change. Then share the process and results through a publication like this one or conference presentations.

Why systems change is essential to implement and sustain IFCDC standards

There is an urgent need for change in systems better to support the neurodevelopment of babies in intensive care units. The evidence shows that gaps exist in the implementation of IFCDC. There is a lack of collaboration among healthcare providers and caregivers in the performance of consistent neurodevelopmental management of the baby. (13, 14, 15) There is a failure to include the parents/family as team members consistently. (16, 17, 18, 19, 20) There is variation in the application of interventions to satisfy mutual goals for the health and well-being of the baby, family, and staff. (21, 22) Care is consistently managed “to” the baby, not “with” the baby. (23) There is an inability to recognize the baby's communication in response to intervention. (24, 25, 26, 27). There is inadequate education and mentoring to guide interaction “with” the baby. (28-35) There is insufficient infant mental health support that is critical to the baby's behavioral communication and nurturing relationship with the parents (25-27) (There is a lack of cultural humility in the interaction between the healthcare team and the family. (36, 37, 38) The evidence-based standards and competencies of systems thinking identify what the principles and practices of IFCDC should look like when caring for babies and families in

intensive care. Change can begin with education about the principles and standards and be implemented by including them in the system's mission, vision, values, culture, environment, practice, and infrastructure to achieve nurturing baby- and family-centered care and optimum neurodevelopmental outcome for the baby. (1, 39)

“Persistence is the key to managing change. The leader must employ positive persistence – when barriers are identified, determine how to address them and move on. Successful change is never easy, but the impact can significantly impact the babies and families we care for in our units.”

Persistence is essential for change to become “how we do things around here.”

Persistence is the key to managing change. The leader must employ positive persistence – when barriers are identified, determine how to address them and move on. Successful change is never easy, but the impact can significantly impact the babies and families we care for in our units. Monitor the metrics and sustain the culture, environment, practice, and performance competence you have worked hard to change for the better.

For a more in-depth description of the theories, models of change,

and guidance on how to implement change, please refer to the White Paper (40, 41)

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