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Institute



Agenda



- Autoliv and Lean methodology at Seattle Children's Research Institute (SCRI)
- State of pediatric Hematology/Oncology research at SCRI
 - Funding portfolio
 - Division overview
- What is TeamMISSION?
- What TeamMISSION does
- Cross-functional dynamics of TeamMISSION
- Future of TeamMISSION







- Seattle Children's has the largest pediatric oncology program in the Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI) region
- Clinical research in oncology is handled through the Seattle Children's Research Institute (SCRI)
- A cornerstone of SCRI's structure is Lean methodology, which is adapted from the Autoliv model





What is Autoliv?



Autoliv, an airbag manufacturing plant in Ogden, Utah, is a teaching facility for Lean methodology where staff learn about operational **efficiency**, reduction in **waste**, **transparent** production processes, and the relationship between employee **engagement** and **success**.





Lean Method 101

- Lean Methodology: reduce waste (i.e., the non-value-added components in any process)
 - Waste can include: defects, waiting, and extra processing
 - Kaizens (aka continuous improvement): a daily mindset and practice





Making the Trip to Autoliv



- SCRI sends staff in leadership positions to Autoliv to study and incorporate
 Lean into daily practice with their staff
 - But this only directly affected a small portion of our workforce
- Autoliv empowers frontline staff to improve, but SCRI acknowledged there
 was room for improvement internally
- In November 2017, SCRI sent a cohort of frontline staff to receive the same training from Autoliv
 - Explore: If you give frontline staff the same education, empowerment, and opportunities for innovation as leadership, what will they create?



From Autoliv to TeamMISSION



- From this came a tangible realization of Seattle Children's vision: One Team, One Mission
 - Improve how different groups within the institute collaborate to become more efficient in our work to achieve our mission
 - Create a culture of accountability, collaboration, improvement, and innovation
- SCRI President: "Let's try something radically different!"
 - Invite Center Support Services (our frontline staff) to Autoliv
 - Center Support Services includes: business office, research finance, sponsored research, institutional review board, and more
 - Based on Lean practices, give frontline staff a relative carte blanche to solve pain points within the organization



The Framework for Change

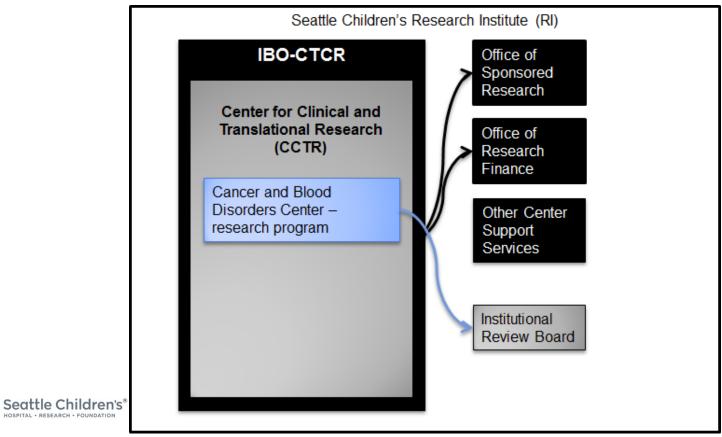


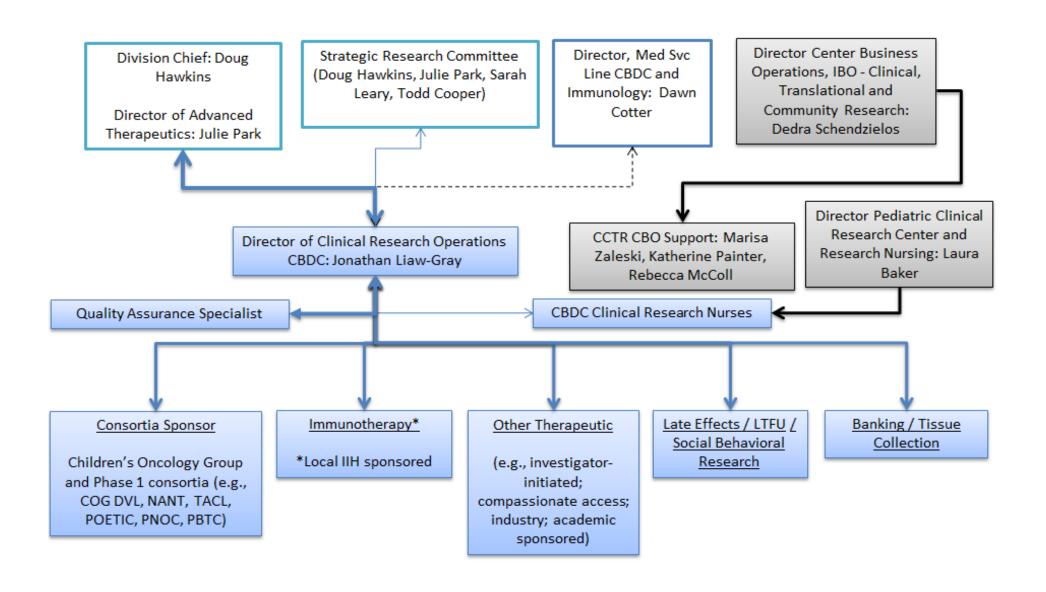
- Support staff from different departments were located in multiple buildings across downtown Seattle
- Correspondence primarily via emails/telephone calls
 - Some departments were actively discouraged from speaking with other department members
 - Scientific teams were not apprised of or had ready access to administrative services
- New programmatic initiatives took longer
- Information visible only to cross-functional team members and not disseminated widely unless successful



CBDC Research Program's Experience







Cancer and Blood Disorders Center (CBDC)

- Our operations supports 15 investigators engaged in clinical trials (pilot, phase 1 phase 4), banking, late effects, long term follow-up, social behavioral research, and other miscellaneous research endeavors.
- 19 Clinical Research Coordinators, 3 Clinical Research Supervisors, 6
 Clinical Research Nurses, 1 QA Specialist



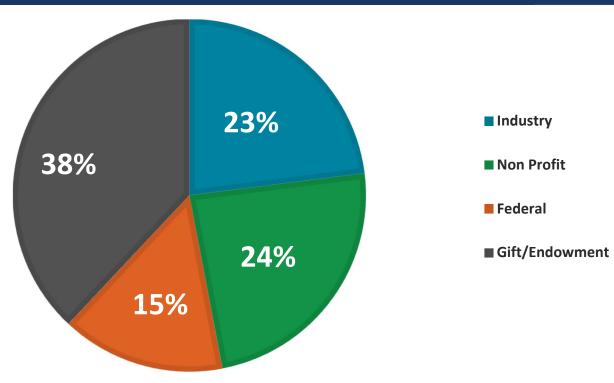
Cancer and Blood Disorders Center (CBDC)

- In 2018
 - 34 new research studies opened
 - 129 Studies were open and available for enrollment within 2018
 - 53 of these studies are phase 1 or phase 2
 - 115 Subjects Enrolled on therapeutic studies
 - 388 Subjects Enrolled in a banking / biology study
 - The CBDC program has over 250 activities / projects that need to be maintained by the Center Business Office.



Funding Sources for CBDC Research







ZM4

Meet TeamMISSION



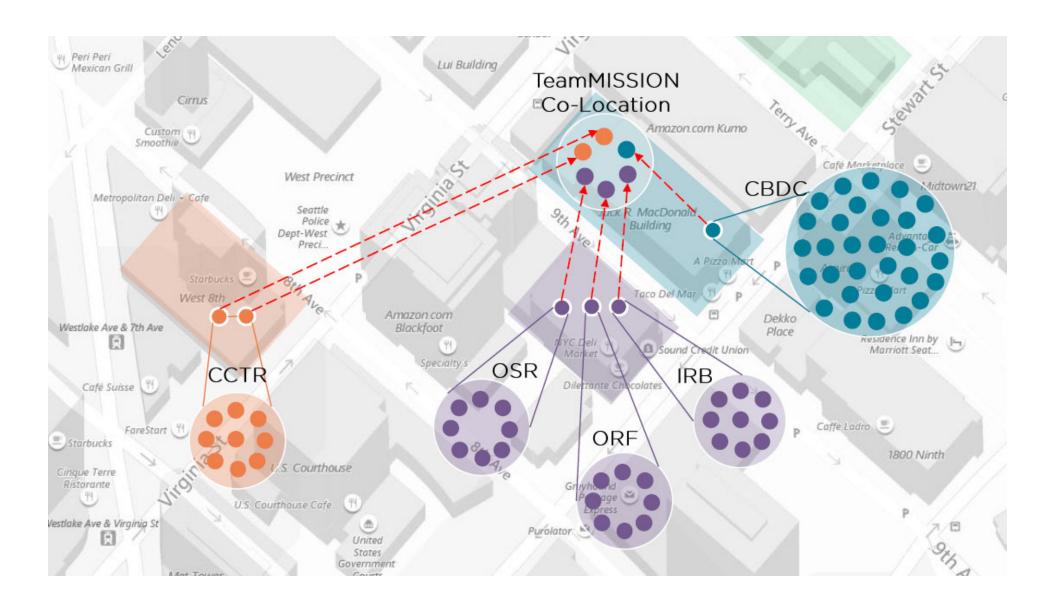
Objective: Aim to improve operational efficiency, reduce waste, increase process transparency, and improve engagement throughout the lifecycle of clinical trials from study initiation through termination

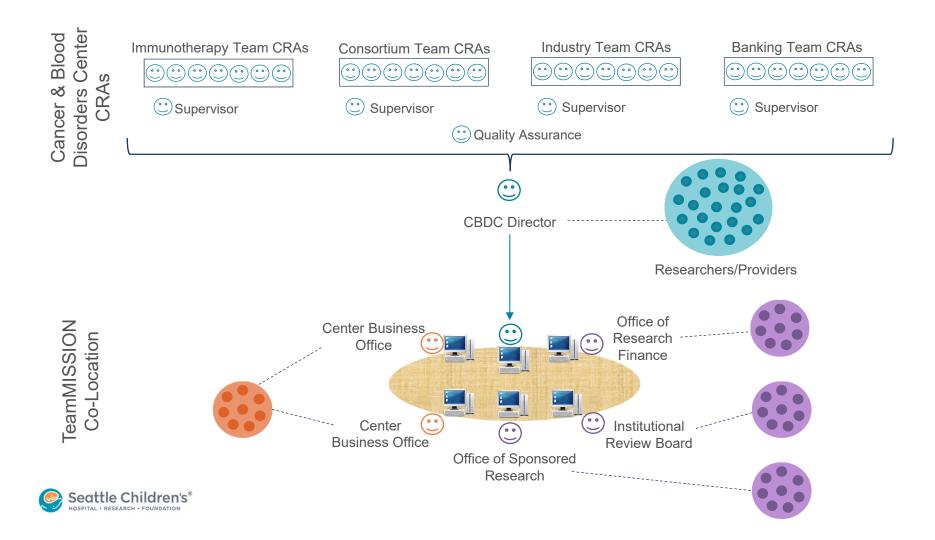
Innovation: Bringing professionals from key departments within research operations and the cancer research program together to form a collaborative, cross-functional team that is **co-located together** in a single office

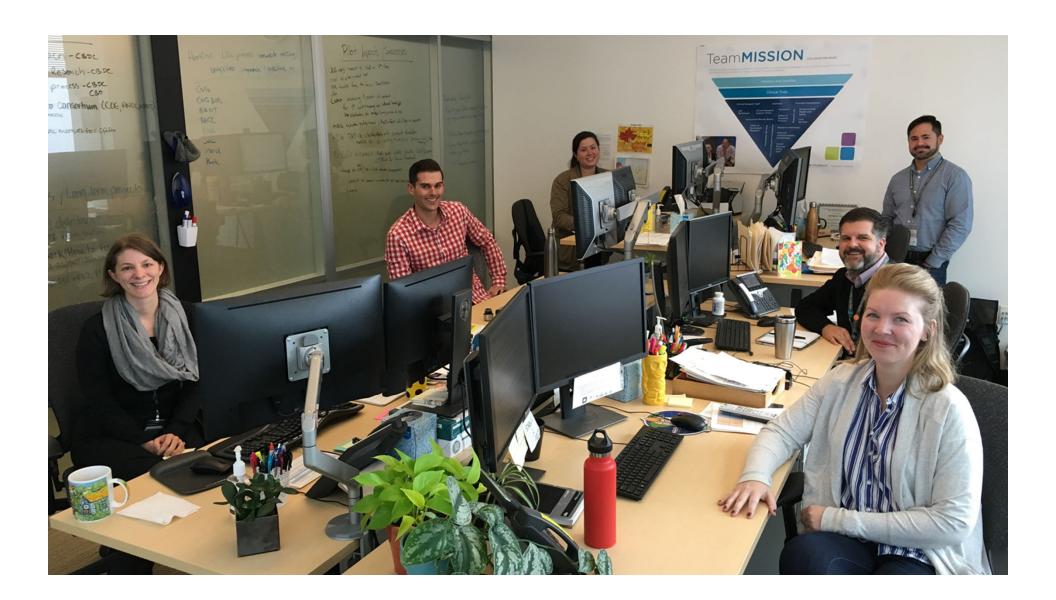


Slide 15

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TeamMISSION CO-LOCATION PILOT

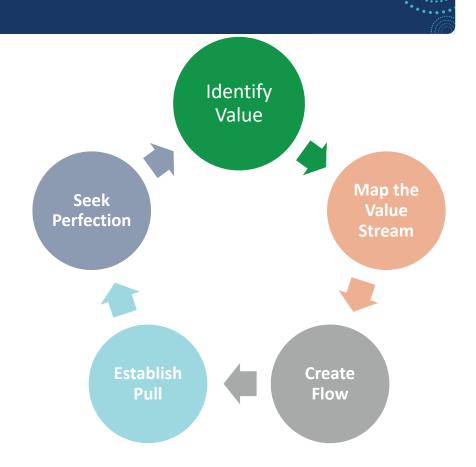
We aim to improve operational efficiency, reduce waste, increase process transparency, and improve engagement throughout the lifecycle of clinical trials from study initiation through termination.



Lean: Identifying Value

- Defined by the customer's needs for a specific product
- CBDC is the customer for TeamMISSION
- Our work is defined by the pain points identified during Autoliv
- Customer need: CBDC needs better access to and processes for clinical operations
- Portfolio-based structure for Center Support Services





Lean: Mapping the Value Stream

- Map next steps involved in creating and delivering the final product (e.g., your value stream)
- Cohort from Autoliv attended regular planning meetings prior to co-location to breakdown approaches to improving clinical operations





Lean: Creating Flow

- Ensure remaining steps flow smoothly with no interruptions or delays
 - Break down silo thinking
- Continuing education with clinical research associates about internal processes
- Reliable Methods for standard practice within CBDC and home departments





Lean: Establishing Pull

- Customer can "pull" the product from you as needed
- Weekly "huddle" structure
- Visibility boards and organizationwide dissemination of progress
- Building new relationships across
 CBDC and Center Support home departments





SDI Concept: Vis Boards & Huddles









Lean: Seeking Perfection

- This is an iterative process and requires continuous improvement
- You never truly achieve perfection, you just keep aiming for it
- Emphasis on teamwork
 - We tend to work best when we aren't siloed from one another
- Actively work on building relationships





TeamMISSION Wins



- Greater communication and cross-team collaboration
 - Attending different home department huddles and meetings
 - Open office hours for research staff to ask their human subjects-research related questions
 - Continuing education meetings and presentations with research staff
 - Evaluating and implementing improvements to widely used forms
- Improvements for research institute processes
- Better access to administrative support for scientific teams
- 8% increase in invoicing for milestone clinical trials
- Improved accounts receivable processes



Challenges TeamMISSION is Facing



- Is this for Hematology/Oncology or the whole institute? Still unclear
 - Tension between TeamMISSION and respective home departments
 - Unsure if current iteration can be generalized to other divisions
- A year later, when is this no longer a pilot?
- Limitations of adapting a production-based Lean model to a healthcare setting
- Competing priorities between home departments and TeamMISSION
- Barriers to being innovative
- Flipping the pyramid is unevenly applied across SCRI
- Unique structure of CBDC
 - We do not know how to expand beyond CBDC



Where is TeamMISSION Going?



- Continue Plan-Do-Check-Act (PDCA)
 - Business practices related to grant/contract administration and finance
 - Evaluate team values and metrics
- Increased focus and awareness of reliable methods and standard forms across the value stream to reduce waste and improve efficiencies
- Identify access points for IRB to work collaboratively with research teams to reduce errors in submissions
- Hematology/Oncology research teams integrating TeamMISSION to strategic planning



Application to Other Institutions



- How could this apply to your institution?
- Think through the wins/challenges outlines
- Resources
 - Does your staff have the capacity to dedicate time to such an initiative?
- Organizational culture
 - Need support from institutional leadership to get off the ground
 - How do you leverage this support?
 - As a manager, how can you work with your staff to empower them?





