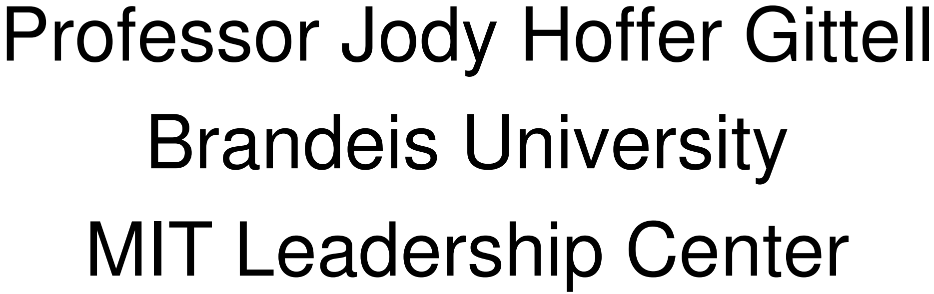
High performance healthcare:

Using the power of relationships to achieve quality, efficiency and resilience



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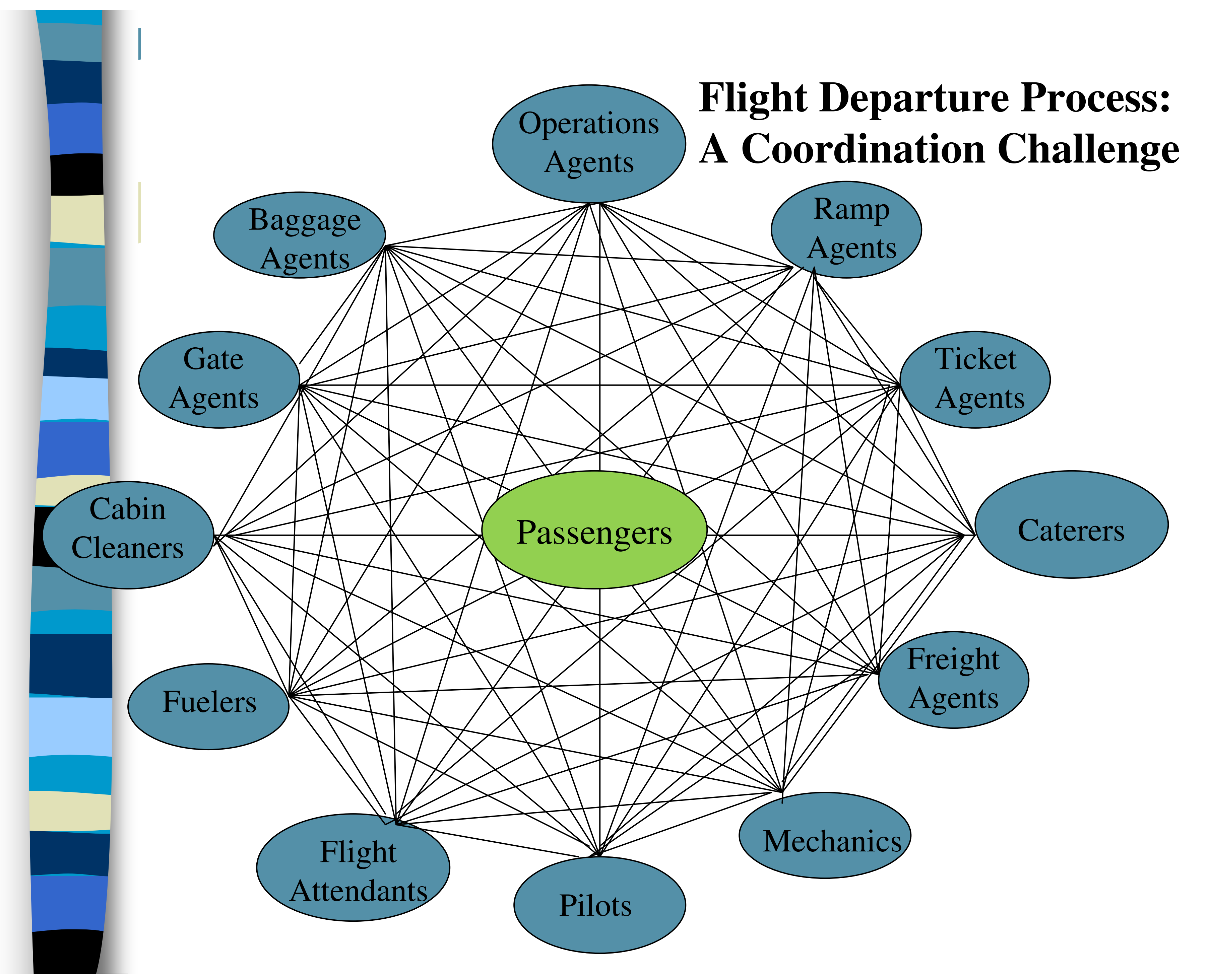
Today we will discuss

- What is relational coordination?
- How does it impact quality, efficiency and employee well-being in airlines and healthcare?
- What steps can be taken in Glostrup?
  - Measuring and mapping RC
  - Conducting interventions to improve RC
  - Adopting high performance work practices to sustain RC


Flight Departure Process:
A Coordination Challenge
Operations Agents
Ramp Agents
Baggage Agents
Ticket Agents
Gate Agents
Caterers
Cabin Cleaners
Passengers
Freight Agents
Fuelers
Mechanics
Flight Attendants
Pilots

AMR: Frequent and timely communication

"Here you don't communicate. And sometimes you end up not knowing things…On the gates I can't tell you the number of times you get the wrong information from operations…The hardest thing at the gate when flights are delayed is to get information."

SWA: Frequent and timely communication

"Here there's constant communication between customer service and the ramp. When planes have to be switched and bags must be moved, customer service will advise the ramp directly or through operations…Operations keeps everyone informed. It happens smoothly."

AMR: Problem solving

"If you ask anyone here, what's the last thing you think of when there's a problem, I bet your bottom dollar it's the customer. And these are guys who work hard everyday. But they're thinking, how do I stay out of trouble?"

SWA: Problem solving

"We figure out the cause of the delay. We don't necessarily chastise, though sometimes that comes into play. It's a matter of working together. Figuring out what we can learn. Not finger-pointing."

AMR: Shared goals

“Ninety percent of the ramp employees don’t care what happens. Even if the walls fall down, as long as they get their check.”

SWA: Shared goals

"I've never seen so many people work so hard to do one thing. You see people checking their watches to get the on-time departure. People work real hard. Then it's over and you're back on time."

AMR: Shared knowledge

Employees revealed little awareness of the overall process. They typically explained their own set of tasks without reference to the overall process of flight departures.

SWA: Shared knowledge

Employees had relatively clear mental models of the overall process -- an understanding of the links between their own jobs and the jobs of their counterparts in other functions. Rather than just knowing what to do, they knew why, based on shared knowledge of how the process worked.

AMR: Mutual respect

"There are employees working here who think they're better than other employees. Gate and ticket agents think they're better than the ramp. The ramp think they're better than cabin cleaners -- think it's a sissy, woman's job. Then the cabin cleaners look down on the building cleaners. The mechanics think the ramp are a bunch of luggage handlers."

SWA: Mutual respect

"No one takes the job of another person for granted. The skycap is just as critical as the pilot. You can always count on the next guy standing there. No one department is any more important than another."

Relationships shape the communication through which coordination occurs ...

Shared goals

Shared knowledge

Mutual respect

Frequent communication

Timely communication

Problem-solving communication

… Or worse

Functional goals

Specialized knowledge

Lack of respect

Infrequent communication

Delayed communication

“Finger-pointing”

This process is called

relational coordination

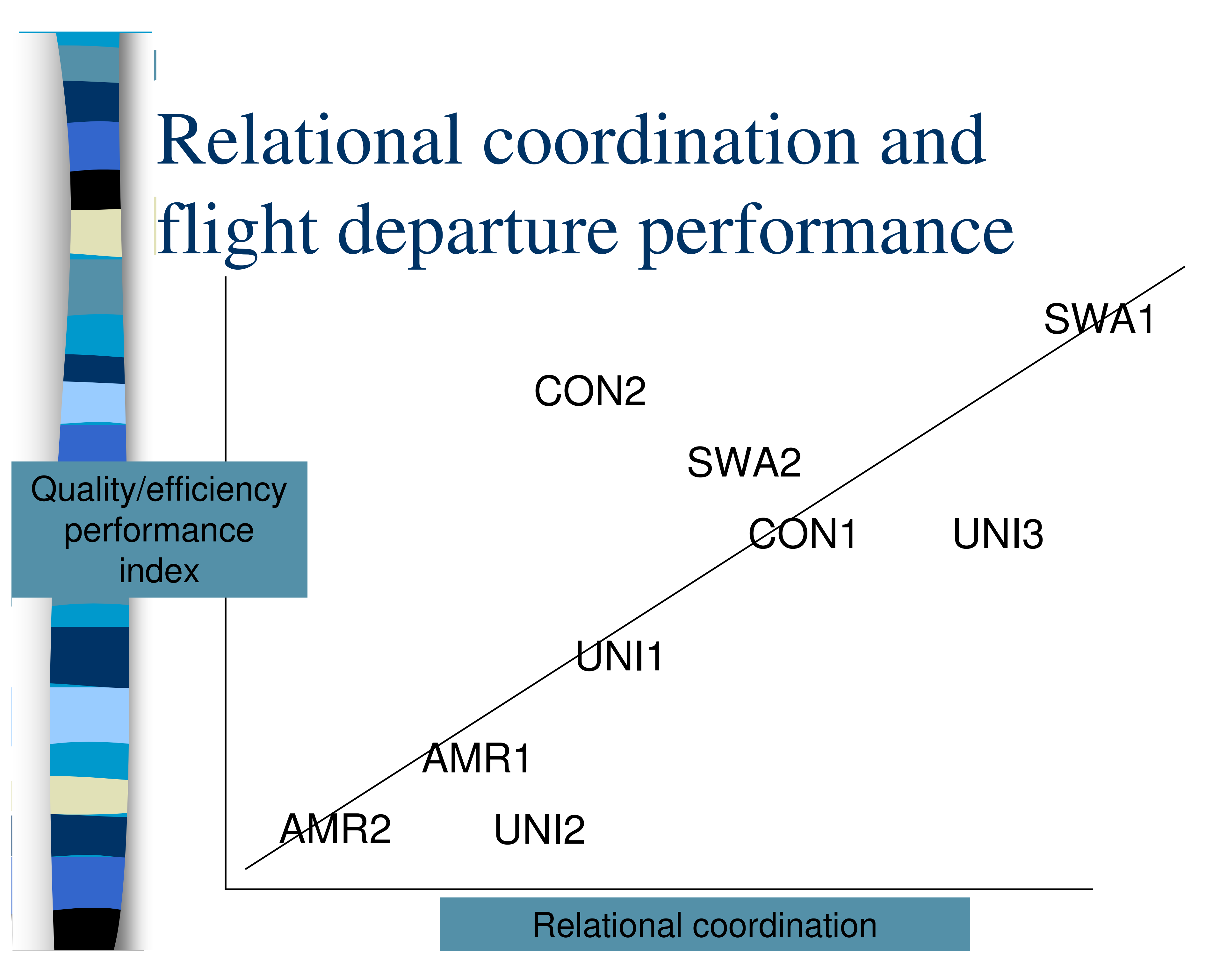
"Communicating and relating
for the purpose of task integration"

Investigated performance effects of relational coordination

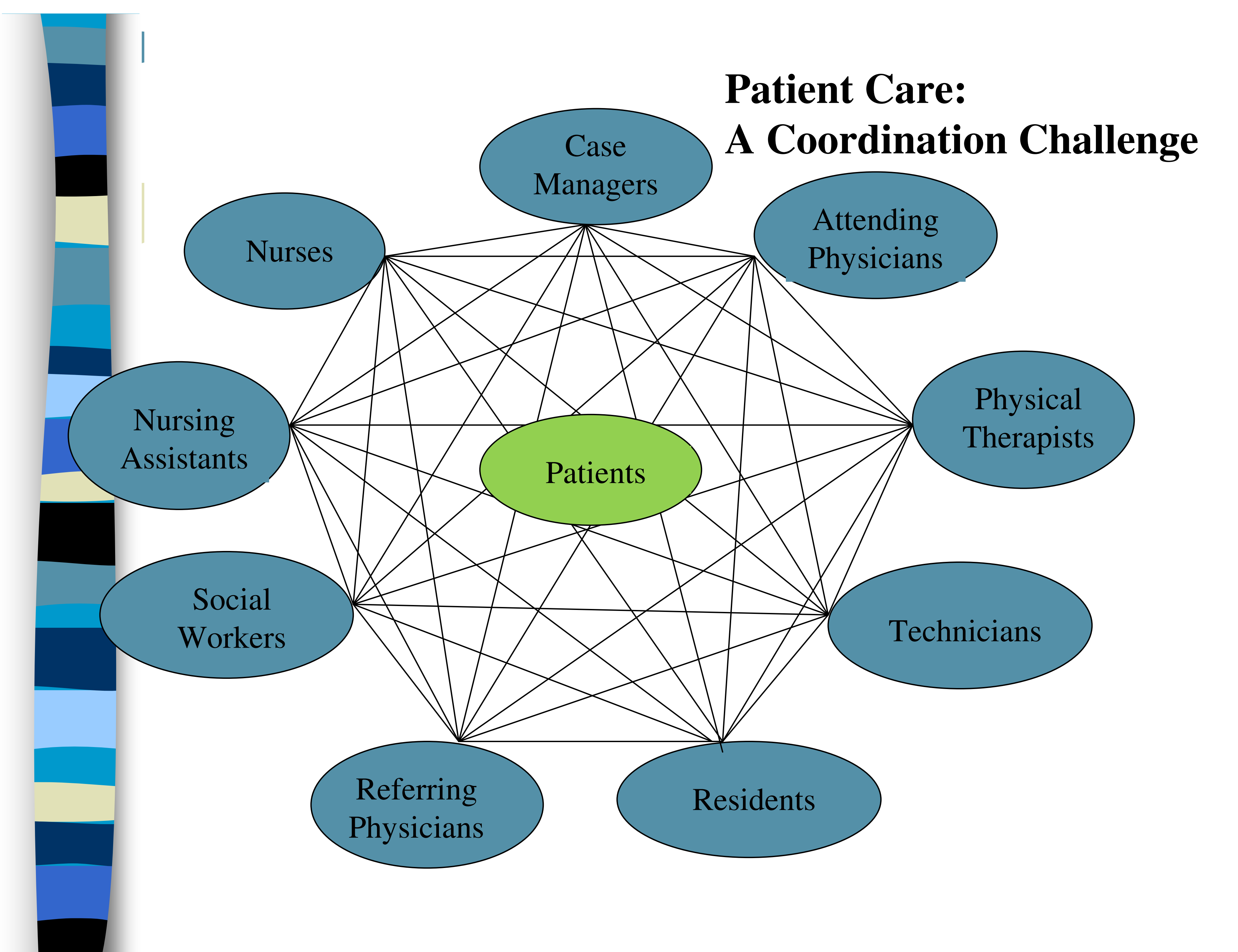
- Nine site study of flight departures over 12 months of operation at Southwest, American, Continental and United
- Measured relational coordination among pilots, flight attendants, gate agents, ticket agents, baggage agents, ramp agents, freight agents, mechanics, cabin cleaners, fuelers, caterers and operations agents
- Measured quality and efficiency performance, adjusting for product differences

Relational coordination and flight departure performance

	Efficiency		Quality		
	Gate time/ flight	Staff time/ passenger	Customer complaints	Lost bags	Late arrivals
Relational coordination	-.21***	-.42***	-.64***	-.31*	-.50**
Flights/day	-.19****	-.37***	-.30***	.13	-.22+
Flight length, passengers, cargo	.79***	.45***	.13	.12	-.54**
Passenger connections	.12**	.19**	.09	.13	.00
R squared	.94	.81	.69	.19	.20


Relational coordination and flight departure performance
SWA1
CON2
SWA2
CON1
UNI3
UNI1
AMR1
AMR2
UNI2
Quality/efficiency performance index
Relational coordination

Does relational coordination matter in other industries?


Patient Care:
A Coordination Challenge
Case Managers
Nurses
Attending Physicians
Nursing Assistants
Patients
Physical Therapists
Social Workers
Technicians
Referring Physicians
Residents

Institute of Medicine report

"The current system shows too little cooperation and teamwork. Instead, each discipline and type of organization tends to defend its authority at the expense of the total system's function." (2003)

Physicians recognize the problem

"The communication line just wasn't there. We thought it was, but it wasn't. We talk to nurses every day but we aren't really communicating."

Nurses observe the same problem

“Miscommunication between the physician and the nurse is common because so many things are happening so quickly. But because patients are in and out so quickly, it’s even more important to communicate well.”

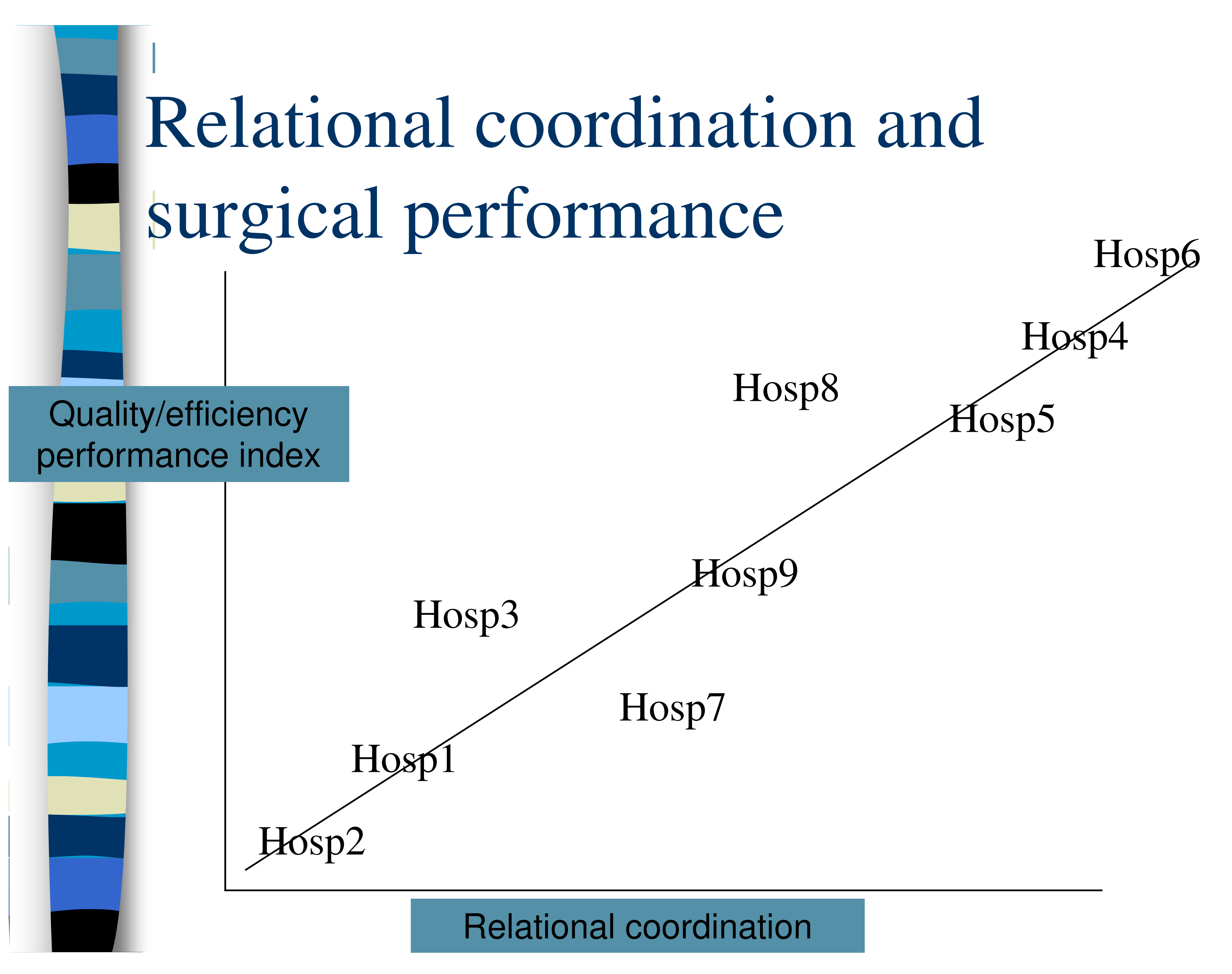
Same study conducted in hospital setting

- Nine hospital study of 893 surgical patients
- Measured relational coordination among doctors, nurses, physical therapists, social workers and case managers
- Measured quality and efficiency performance, adjusting for patient differences

Relational coordination and surgical performance

	Length of stay	Patient satisfaction	Freedom from pain	Mobility
Relational coordination	-.33***	.26***	.08*	.06+
Patient age	.02	.00	.01	.04
Comorbidities	.09*	.07	.01	.04
Pre-op status	.03	.01	.20***	.28***
Surgical volume	.11**	.10*	.06+	.03
R Squared	.82	.63	.50	.22

Observations are patients (n=878) in hospitals (n=9). Model also included gender, marital status, psychological well-being and race. Standardized coefficients are shown.



Relational coordination and surgical performance
Quality/efficiency performance index
Relational coordination
Hosp6
Hosp4
Hosp8
Hosp5
Hosp9
Hosp3
Hosp7
Hosp1
Hosp2

Findings extended in other healthcare settings

- Medical care units in Boston suburban hospital
- Medical, surgical and intensive care units in Pennsylvania rural hospitals
- Chronic care in Boston low income community health centers
- Chronic care in California multi-specialty group
- Nursing homes in Massachusetts

There are other responses to coordination challenges…

- Reengineering
- Total quality management
- “Lean” strategies
- Redesigning work flows

But addressing technical issues is often not sufficient

"We've been doing process improvement for several years, and we think we're on the right track. But we've tried a number of tools for process improvement, and they just don't address the relationship issues that are holding us back."

-- CMO, Tenet Healthcare Systems

Why does relational coordination work?

Relational coordination provides the *cultural or relational underpinnings* for process improvement or “lean” strategies

Why does relational coordination work?

Relationships of *shared goals, shared knowledge* and *mutual respect* empower workers to connect in a meaningful way across boundaries

Allowing them to coordinate “on the fly” – increasing their ability to improvise when needed

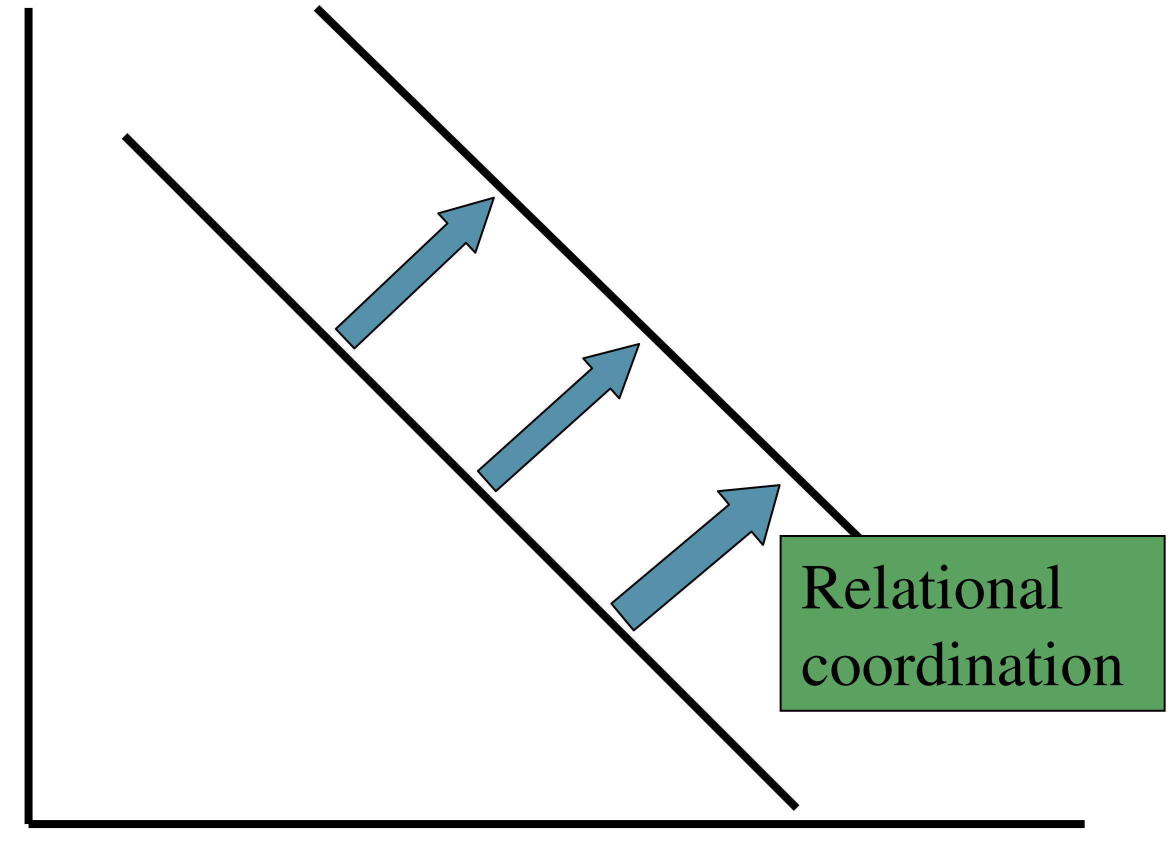
How does relational coordination impact workers?

Relational coordination improves worker outcomes

- Increases job satisfaction
- Increases professional efficacy
- Reduces burnout
- Reduces emotional exhaustion
- Increases resilience under pressure

Relational coordination *pushes out* the quality/efficiency frontier while improving worker well-being

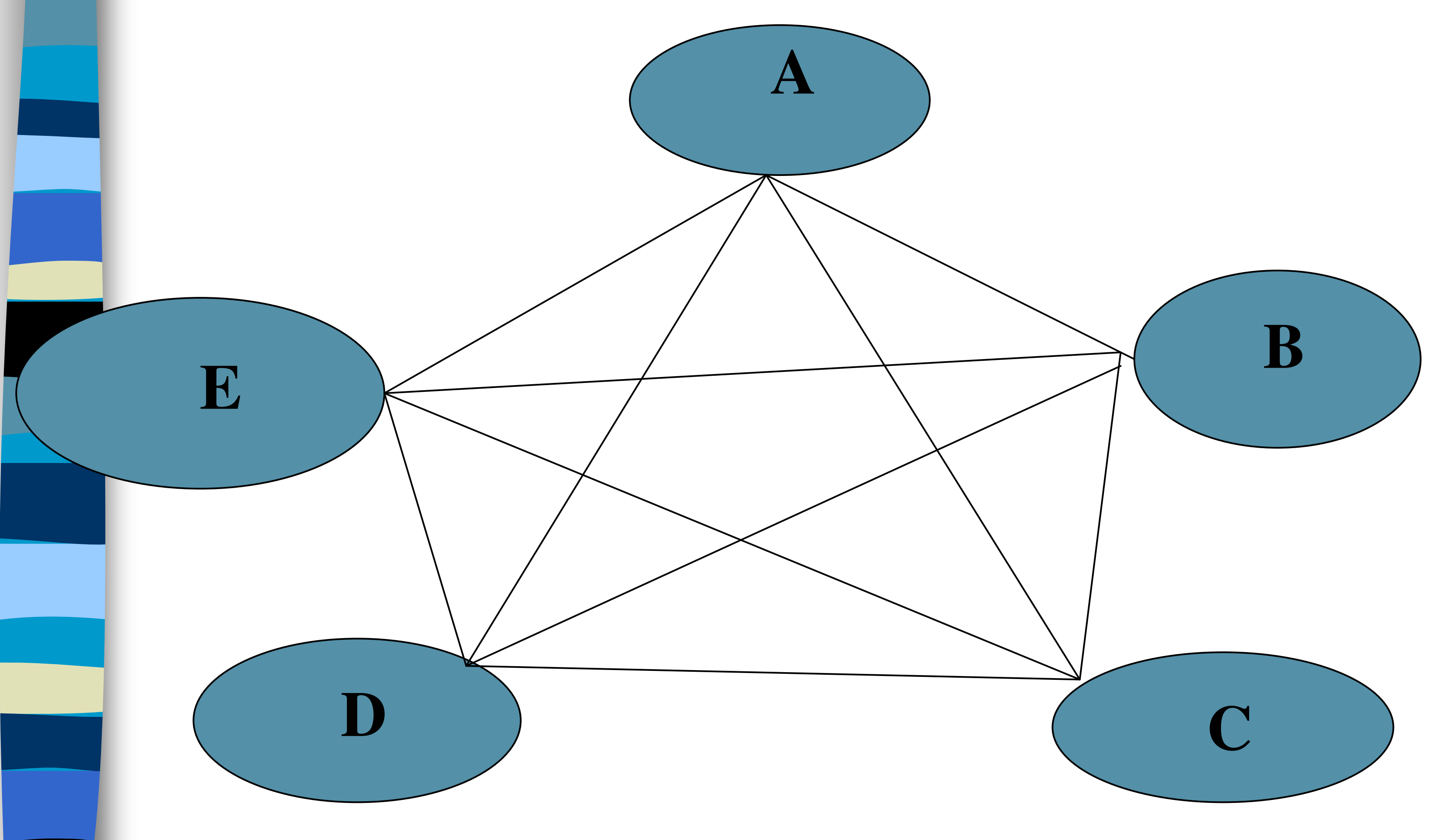
Quality



Efficiency

How does relational coordination look in Glostrup Hospital?

Relational coordination in the patient care process



Shared goals

Shared knowledge

Mutual respect

Frequent communication

Timely communication

Problem-solving communication

Negative cycle?

Functional goals

Specialized knowledge

Lack of respect

Infrequent communication

Delayed communication

“Finger-pointing”

How can we measure and map relational coordination?

Measuring and mapping relational coordination

- Choose focal work process
- Identify work groups involved
- Identify key performance outcomes
- Create network map
- Measure RC between work groups
- Map results
- Identify the weak ties, strong ties
  - Reasons for weak ties, strong ties?
  - Any impact on performance outcomes?

Measuring relational coordination

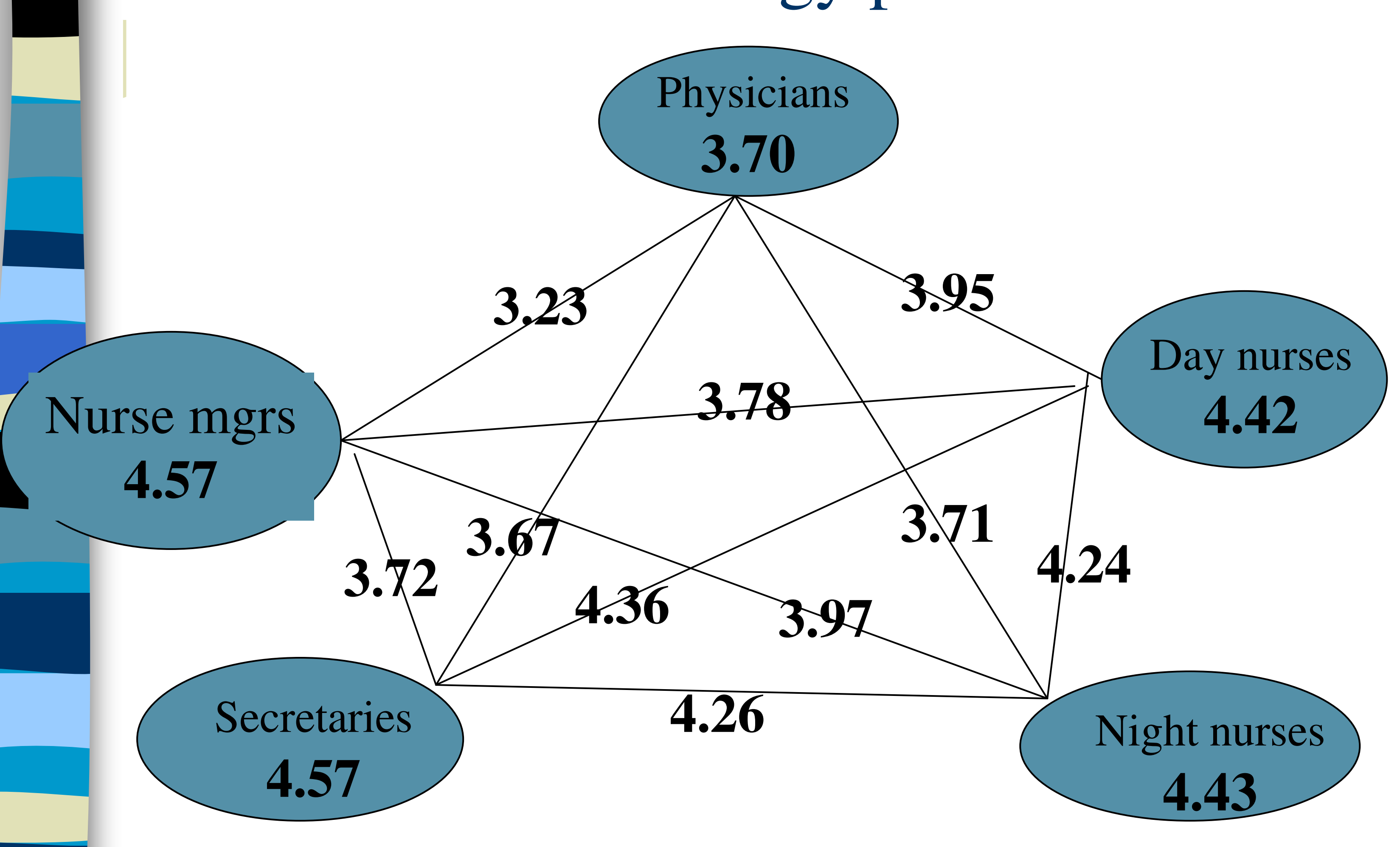
RC dimensions	Survey questions
1. Frequent communication	How *frequently* do people in each of these groups communicate with you about [focal work process]?
2. Timely communication	How *timely* is their communication with you about [focal work process]?
3. Accurate communication	How *accurate* is their communication with you about [focal work process]?
4. Problem solving communication	When there is a problem in [focal work process], do people in these groups blame others or try to *solve the problem*?
5. Shared goals	How much do people in these groups *share your goals* for [focal work process]?
6. Shared knowledge	How much do people in these groups *know* about the work you do with [focal work process]?
7. Mutual respect	How much do people in these groups *respect* the work you do with [focal work process]?

Do people in these groups share your goals for [work process]?

	Not at all		Somewhat		Completely
Group A	1	2	3	4	5
Group B	1	2	3	4	5
Group C	1	2	3	4	5
Group D	1	2	3	4	5
Group E	1	2	3	4	5

Sample question – each question is asked in the same format, with the work groups of interest listed on the left.

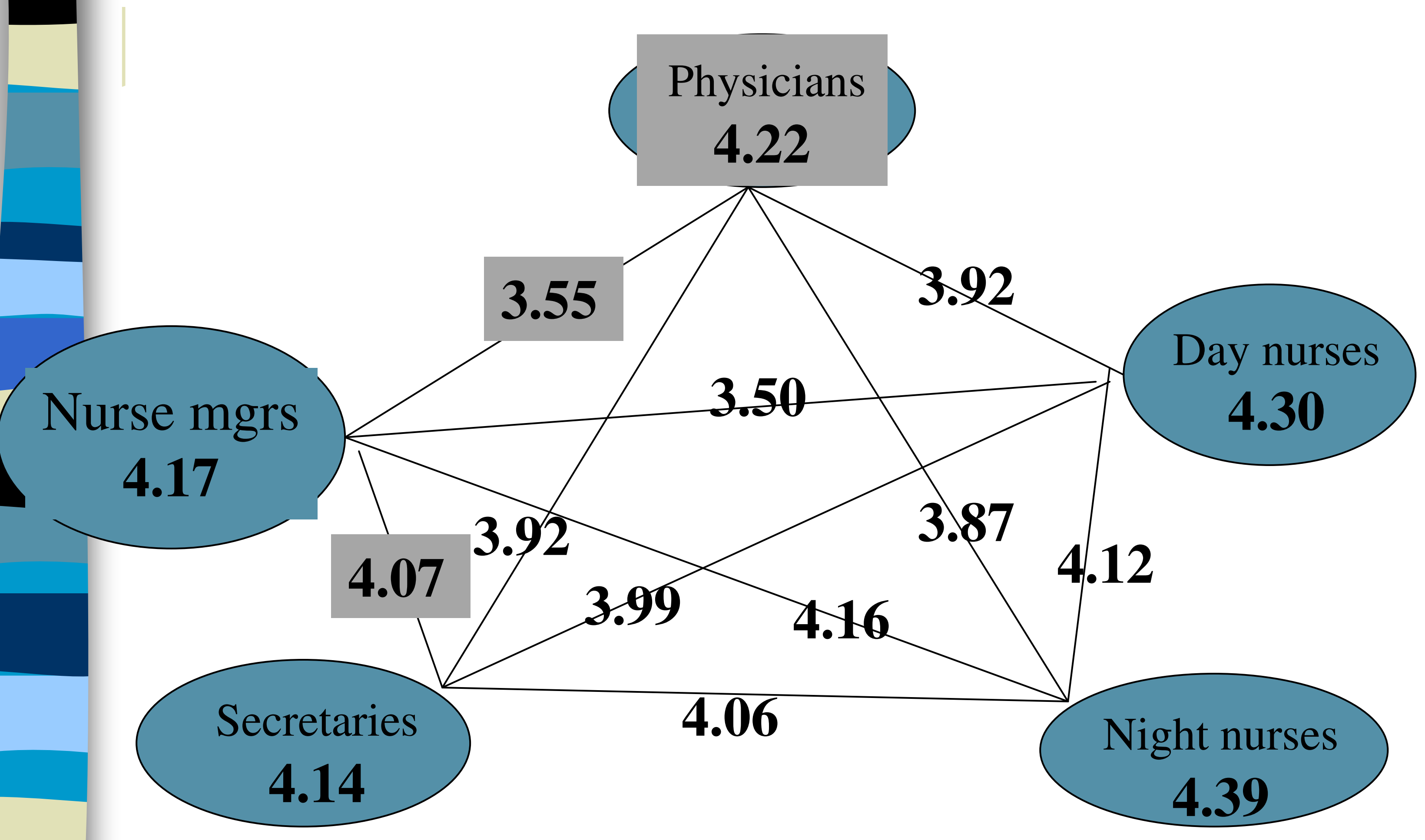
Mapping relational coordination in a neonatology practice



Consultant was asked to help

- Physicians considered to be a “problem”
- Uncivil behaviors among themselves and with other groups
- Consultant focused on physicians, using
  – Appreciative inquiry
  – New physician group leader
  – Coaching and goal-setting
  – Accountability for relational behaviors
  – Established weekly meetings to check in, make group decisions

Mapping relational coordination
after six month intervention



Shaded numbers indicate significant positive change

Another way to look at relational coordination *before and after six month intervention*

	Phys	Day nurses	Night nurses	Secretaries	Nurse managers
Physicians	3.70 4.22	4.02 3.86	3.83 3.83	3.56 3.83	3.36 3.40
Day nurses	3.87 3.97	4.42 4.30	4.30 4.20	4.29 3.97	3.70 3 .85
Night nurses	3.59 3.90	4.18 4.04	4.43 4.39	4.23 4.11	4.08 4.18
Secretaries	3.77 4.00	4.43 4.00	4.29 4.00	4.57 4.14	3.86 4.00
Nurse managers	3.09 3.69	3.86 4.14	3.86 4.14	3.57 4.14	4.57 4.17
All groups	3.60 3.96	4.18 4.07	4.14 4.11	4.04 4.04	3.91 3.92

Another way to look at relational coordination *before and after six month intervention*

RC dimensions	Physicians	Day nurses	Night nurses	Secretaries	Nurse managers
Frequent communication	4.31 4.66	4.92 4.83	4.74 4.78	4.87 4.77	4.17 3.80
Timely communication	3.71 4.15	4.37 4.36	4.03 4.37	4.14 4.14	3.47 3.41
Accurate communication	3.93 4.20	4.42 4.23	4.12 4.15	4.24 4.22	3.68 3.76
Problem-solving communication	3.41 3.92	3.78 3.78	3.73 3.92	3.88 4.15	3.79 3.81
Shared goals	3.63 3.94	4.14 4.39	4.13 4.26	4.06 4.04	3.84 3.76
Shared knowledge	3.51 3.48	4.06 3.96	4.03 3.96	3.63 3.48	3.38 3.03
Mutual respect	3.32 3.71	3.91 3.96	4.13 4.07	4.06 4.00	3.63 3.41
RC index	3.74 4.10	4.27 4.24	4.17 4.24	4.14 4.15	3.81 3.66

Outcomes of intervention

- Relational coordination improved
  - Among physicians
  - Between physicians and nurse managers
  - Between nurse managers and secretaries
- But RC stayed the same or got worse
  - Between other groups
- “Shared knowledge” did not improve for anyone, even physicians
- Lessons we can learn?

Lessons learned

- Focus on physicians excluded the other work groups
  - Intervention should be inclusive of all groups to strengthen all ties, and avoid backlash
- Focus on physicians ignored the overall work process
  - Intervention should focus on work process to give all groups something to work on together
  - Keep the focus on improving relationships *for the purpose of improving performance outcomes*
  - Focus on the work process can reveal interconnections between jobs – process mapping

Once we improve relational coordination, how to sustain it over time?

High performance work practices to sustain relational coordination

Select for teamwork

Measure team performance

Reward team performance

Resolve conflicts proactively

Invest in frontline leadership

Design jobs for focus

Make job boundaries flexible

Create boundary spanners

Connect through pathways

Broaden participation in patient rounds

Develop shared info systems

Partner with suppliers

Relational Coordination

Relationships
Shared goals
Shared knowledge
Mutual respect

Communication
Frequent
Timely
Accurate
Problem-solving

Quality Performance

Efficiency Performance

Job Satisfaction

Select for teamwork

"Here technical expertise exceeds teamwork ability as a criterion; doctors expect teamwork of others simply by virtue of the fact that they are doctors, after all."

Select for teamwork

“You’ve got to be a nice person to work here…We pick it up through their references. The doctors here are also sure to know someone who knows that doctor.. . . . Nurses like it here because physicians respect their input.”

Select for teamwork

“Teamwork with nurses is always important—we’re always dealing with them. So is teamwork with physicians. We need to know if the physical therapist has an attitude toward physicians because it is so important to communicate with the doctors.”

Select for teamwork

"You can be the best social worker in the world, but if you can't work with the other disciplines, then you can't work here. Some are very good diagnostically. But it's the communication skills [we are looking for]."

Measure team performance

"The quality assurance (QA) committee is strictly departmental and it's strictly reactive. Everybody is giving reports to QA but nobody is listening or learning. The QA committee satisfies hospital-wide reporting requirements. But it's not effective. We have board members on that committee, but we still can't get it to work. People have a bad attitude when they go. It's a lengthy, cumbersome meeting."

Measure team performance

“Quality assurance used to be completely reactive here, with incident reports. There would be a review to determine injury or no injury. QA is more real-time now, not so reactive.”

“But we don’t have a full system in place. It’s evolving… It’s not cross-functional yet. Usually I take the nurses and the chief of the service takes the physicians. There is finger-pointing.”

Measure team performance

“We have a history of punitive measures. Now it’s ‘what makes competent people fail? What in the system failed? What piece of information was missing?’ We are looking at a learning perspective now. It’s still a QA function. But now it’s more like quality improvement.”

Measure team performance

"We have a Bone Team which includes the service line director, the case management supervisor, the head of rehab, the VP for nursing, the nurse manager, the clinical specialist, three social workers and three case managers. We generally look at system problems."

Resolve conflicts proactively

"I would say that for any non-physician to challenge a physician has the whole episode laced with pitfalls. For a nurse, a therapist, a pharmacist, a social worker, a nutritionist, an occupational therapist to challenge a physician is up there with losing a job or getting a divorce—very stressful. And I can say personally as a nurse that in my more formative years that was something that you would try to avoid at all costs."

Resolve conflicts proactively

"The kinds of conflicts we often have are disagreements about the patient's treatment plan: what it should be. It can go across all of the groups. The other big thing is getting a physician to come up to the unit, to be available. . . . We have a formal grievance process if you're fired, but not for conflicts among clinicians. . . . There are no particular processes. We just hope people use common sense and talk to each other."

Resolve conflicts proactively

"We have a physician relations committee, which deals with conflicts between the hospital personnel and the doctors and sometimes deals with doctor-doctor conflicts. There is a surgical relations committee that deals with specific incidents that occur in the OR (like, for instance, when a doc is abusive to a nurse or another doc in the OR). Each of these committees has about seven members: one nurse, one administrator, and the rest are mostly doctors and allied health professionals."

Resolve conflicts proactively

"We have a staff council that's largely responsible for information sharing among the departments. The staff council deals with medical policy and conflict resolution. . . . It's an informal body to air differences. It's more for problem solving. We have monthly meetings that are attended by all medical staff, including physicians, nursing, and social work."

Resolve conflicts proactively

“We implemented training classes for all employees that teach employees how to deal with conflict resolution, including adopting appropriate behaviors. There is a Pledge to My Peers, which is a structured format for resolving conflicts in a peer-to-peer fashion. Aggrieved employees are encouraged to approach the coworker or supervisor or whoever and say, ‘I would like to speak with you regarding the pledge.’”

Make job boundaries flexible

"There are certain cultural tendencies that inhibit others from doing their work. Therapists train nurses in mobility, but still nurses are often reluctant to deal with moving the patient, getting the patient out of bed, etc. It's partly because they feel they aren't qualified, and partly because that's just considered a PT thing."

Make job boundaries flexible

“There are customs – like the fact that a physical therapist will never deal with bedpans and such – that go above and beyond licensing. These customs have a negative effect, like when a physical therapist will go get a nurse just to deal with the bedpan, making things difficult.”

Make job boundaries flexible

“[Here] physical therapists definitely do the bedpans. You see, length of stay is so compressed and time is so valuable. You’ll only delay yourself if you try to hunt down the nurse’s aide.”

Make job boundaries flexible

"We only have work rules insofar as different people are trained to use certain equipment. In general we have collaborative practices that allow people to pick up each other's slack…We try to give each person a better understanding of the other's role   We do team care, and we even include the patients as members of the team."

Create boundary spanners

"Our case managers work an eight-hour day, actually closer to nine, five days a week. On weekends they take turns carrying a beeper, and there are usually a couple of phone calls during the weekend that they need to take care of. The problem is that they are overworked—they have about 5 to 7 too many patients. The time factor interferes with their ability to be proactive."

Create boundary spanners

"I am responsible for about 30 patients. . . . With this number, I just look at the list for problem patients."

Create boundary spanners

"A lot of what I'm doing is providing a common link in communication. As we all know, every single thing you ever learn about somebody is not written down somewhere. It's about the consistency—this person's told you something that you normally wouldn't write down as a clinical charge, that you can pass down to the next person that's going to be taking care of him or pass on to the next group of nurses."

Create boundary spanners

"The case manager does the . . . discharge planning, utilization review, and social work all rolled into one. The case manager discusses the patient with physical therapy and nursing and with the physician. He or she keeps everyone on track. The case manager has a key pivotal role—he or she coordinates the whole case."

High performance work practices to sustain relational coordination

Select for teamwork

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Reward team performance

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Invest in frontline leadership

Design jobs for focus

Make job boundaries flexible

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Connect through pathways

Broaden participation in patient rounds

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Relationships
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Communication
Frequent
Timely
Accurate
Problem-solving

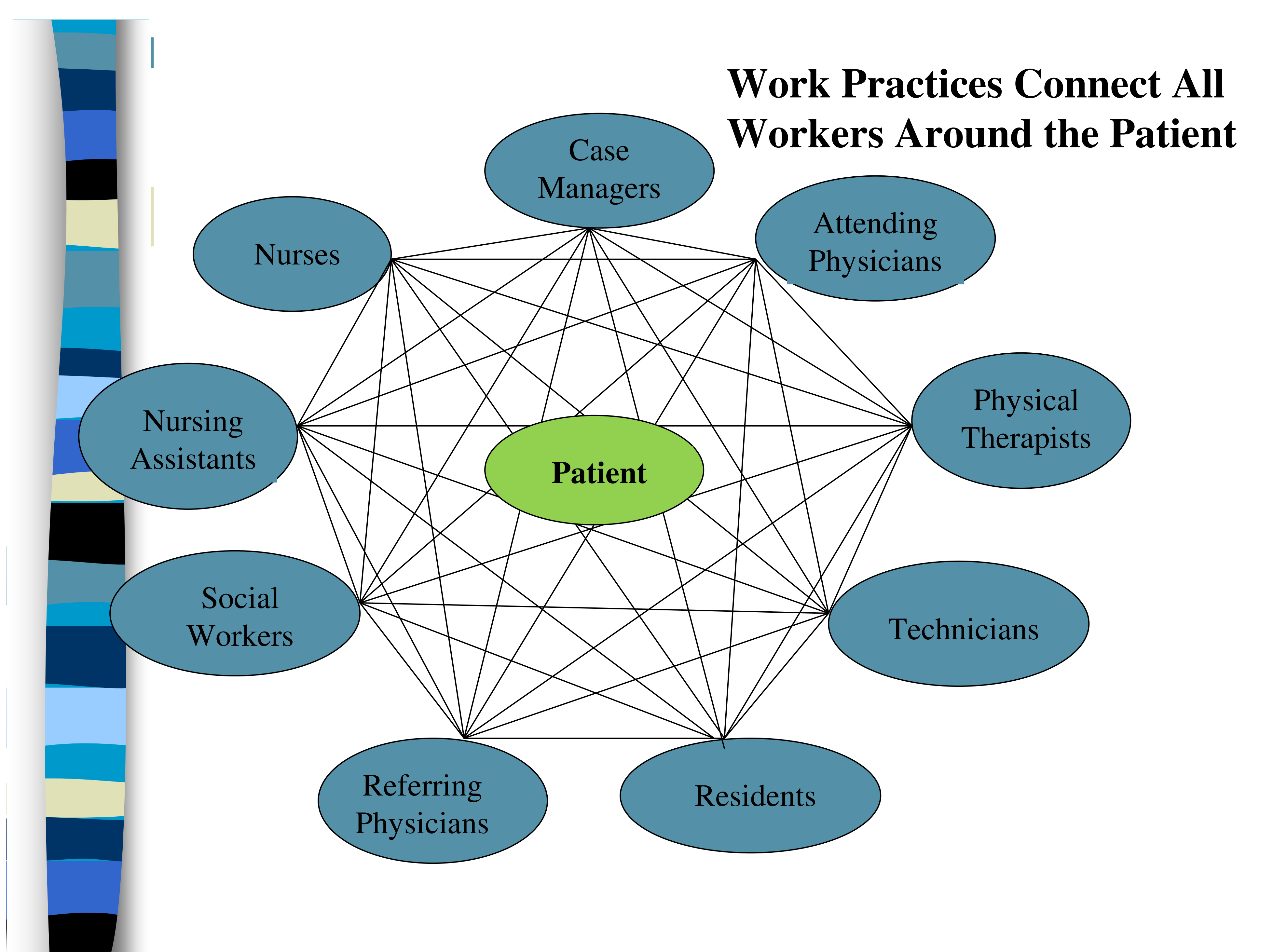
Quality Performance

Efficiency Performance

Job Satisfaction

A high performance work system

- These work practices are all cross-cutting, strengthening connections across the silos that usually divide workers
- Together they form a unique type of **high performance work system**
- Increases both quality and efficiency
- Increases job satisfaction, professional efficacy
- Reduces turnover, burnout
- Also likely to increase **worker engagement** – why?


Work Practices Connect All
Workers Around the Patient
Case
Managers
Nurses
Attending
Physicians
Nursing
Assistants
Patient
Physical
Therapists
Social
Workers
Technicians
Referring
Physicians
Residents

What have we learned about improving performance?

Where to start?

Step 1: Measure and map relational coordination

- Identify a work process needing improvement
- Identify work groups in that work process, get them involved
- Identify and measure critical performance outcomes
- Measure RC using worker survey
- Map RC network, discuss strengths and weaknesses

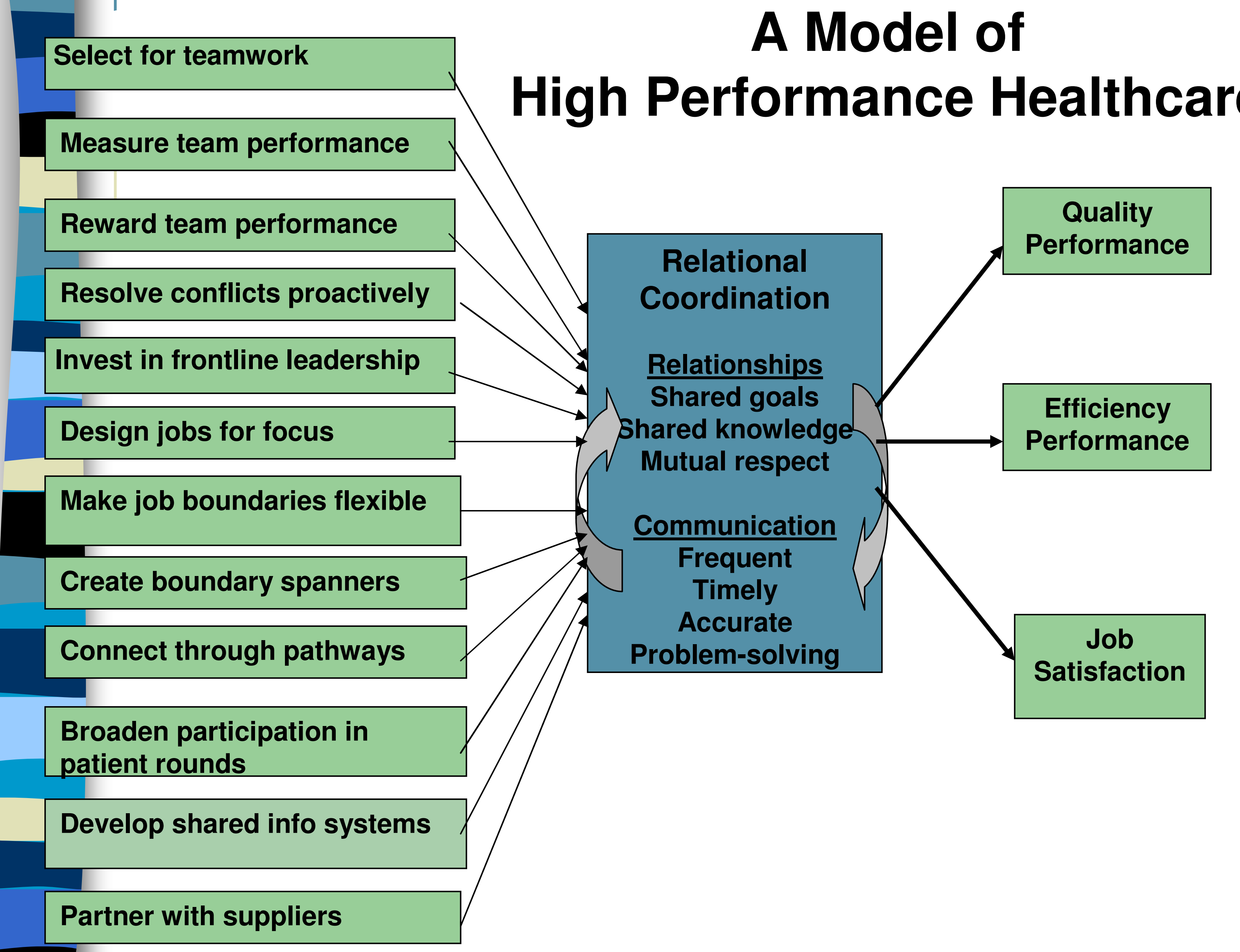
Step 2: Intervene to improve relational coordination

- Use information from Step 1
- Conduct process improvement to improve the work process
- Provide coaching to build shared goals, shared knowledge, mutual respect
- Measure performance again
- Measure RC again
- Review results

Step 3: Assess and improve high performance work practices

- Assess high performance work practices in the organization
- Which ones support RC?
- Which ones do not?
- Develop a plan of action for improving these work practices
  - Involve human resources, operations, work environment professionals, union leadership, frontline workers

A Model of High Performance Healthcare



“A blueprint for improving healthcare quality while reducing costs—just what the doctor ordered.”
—Thomas A. Kochan, Professor, MIT Sloan School of Management

HIGH PERFORMANCE HEALTHCARE

Using the Power of Relationships to Achieve Quality, Efficiency and Resilience

JODY HOFFER GITTELL

Award-winning author of *The Southwest Airlines Way*

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