



## Diagnosing and Treating Your Practice

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Deborah Johnson  
[www.clinicalmicrosystem.org](http://www.clinicalmicrosystem.org)

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## Clinical Microsystems and Your Practice

- Practices are the unit of action where health care clinicians and patients and families interact to provide care and services. Diagnosing and treating practices can be done utilizing clinical microsystem thinking and tools. A case study and journey through the process will be presented.

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## Objectives

- Diagnose their own practice (clinical microsystem) to identify opportunities to design and improve their processes for patient care and improved workforce morale.
- Create an action plan to apply the clinical microsystem tools and methods in their own clinical setting

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## Special Acknowledgements

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Dartmouth Medical School

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Research for Pediatrics, University of Chicago

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**A great practice.  
A great clinical microsystem.**

“They give me exactly what I want (and need) exactly when I want (and need) it . . .  
. . . While maintaining and improving a joyful work environment and a financially viable organization.”

- Don Berwick, MD  
CEO, President IHI

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## Focus on Microsystems

“Every system is perfectly designed to get the results it gets.”

Paul Batalden, MD

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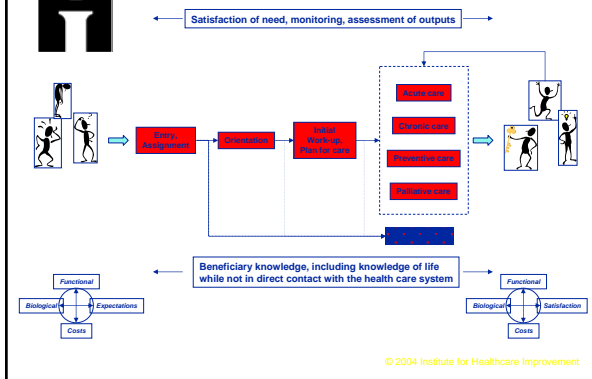
## A Picture of a Microsystem

### The Physiology

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## A "Generic" Clinical Microsystem model



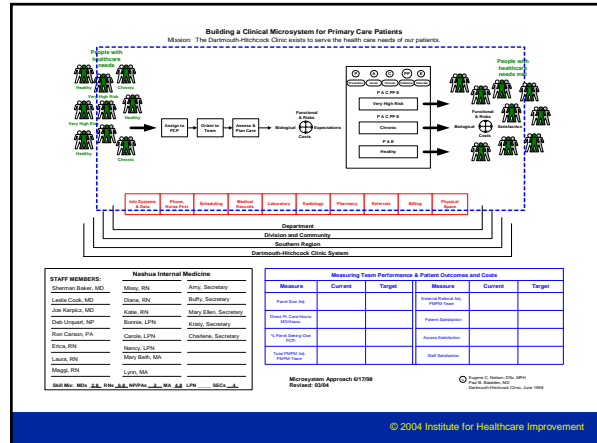
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## A Picture of a Microsystem

### The Anatomy

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## Why this focus?

- Basic building block of health care.
- Unit of clinical policy-in-use (vs. "espoused".)
- Good value & safe care "made" here.
- Patient satisfaction variables largely controlled here.
- Work practice "dissatisfiers" are controlled here and "genuine motivators" are present here— making real joy, pride in health professional work possible.
- Setting for life-long professional "formation."
- Living adaptive health care system "laboratory" with structure, pattern & process.

From our work with ~120 clinical microsystems in six countries

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## Microsystem Definition

A microsystem in health care delivery can be defined as a *small group* of people who work together on a regular basis to provide care to discrete subpopulations of *patients*. It has clinical and business *aims*, linked *processes*, shared *information* environment and produces performance *outcomes*. They evolve over time and are (often) *embedded* in larger organizations.

As a type of complex adaptive system, they must: (1) do the work, (2) meet staff needs, (3) maintain themselves as a clinical unit.

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**Isn't "clinical microsystem" just a different name for what others have called, the health care "team"?**

- No, the clinical microsystem includes the small population of patients (customers) as part of the same system as the providers (pharmacy staff).
- No, it includes information & information technology as a "full" participant.

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**Microsystems are the *building blocks* that come together to form Macro-organizations**

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**An example from Jönköping, Sweden**

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**Research on High Performing Microsystems.**

**What makes the best the best**

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**Evolution of "Clinical Microsystems"**

[www.clinicalmicrosystem.org](http://www.clinicalmicrosystem.org)

Timeline:

- late 1970's & 1980's: World-wide research and study of best-of-best service organizations; Deming; Caring for Pts & Populations; Clinical Value Compass
- 1992: Bataiden, Nelson Research and Knowledge Development
- mid-90's: CECS course on Micro-units; HFHS "panels" of patients
- 1998: Hierarchy of Systems
- 2000: IOM and Julie Mohr and Molla Donaldson
- 2001: IOM 21st Century
- 2001: Robert W. Johnson Foundation Study
- 2001: 8 Success Characteristics; 10 Success Characteristics
- 2001: Website Formed
- 2001-2002-3: Fall Invitational; JQI Articles
- Future

**Recent Research**

- Institute of Medicine Study 2000
- Dartmouth - Robert Wood Johnson Foundation Study 2002

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## Dartmouth Study 2002

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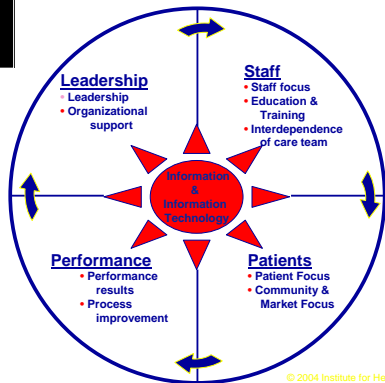


## Series of Articles

Eugene C. Nelson, DSc, MPH  
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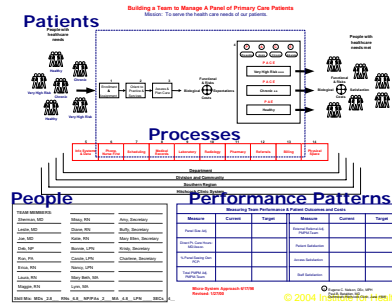
rovement



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## Self-Awareness Journey



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## What to do? Diagnose and Treat!

- Learn about "current state"
- Intentionally design and improve the workplace
- Pay detailed attention to the workforce (PEOPLE)
- Optimize each individual
- Provide feedback systems
- Engage an improvement coach

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## Some Principles

- Local leadership is responsible for creating positive staff focus
- Hire smart to select right people & grow their capabilities
- Optimize roles for efficient care
- Foster trust, sense of interdependency & self worth
- Empower (& expect) all staff to do their work and improve their work
- Get together (regularly) or fall apart

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## Winning Approach

- Let everyone help meet patients' needs
  - Redesign care model to optimize roles in core process of delivering care
  - Plan regular weekly meetings
  - Use "Assessing Your Practice" as a springboard
  - Integrate improvement knowledge along the way

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## Inside - Out Improvement

- Must Have
  - Leadership
  - Physician involvement
  - Nursing involvement
  - Support staff involvement
  - Administrative support
  - Protected Time and facilitation

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## How do you begin to Diagnose?

- Adapt and utilize a helpful tool to diagnose your practice...
- Assessing Your Practice
- "The Green Book"

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## Use the Green Book . . .

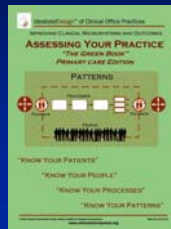
As a diagnostic tool and to provide a guided discovery of your patients, people, processes, and patterns to start thinking about improvement...from the "inside-out"

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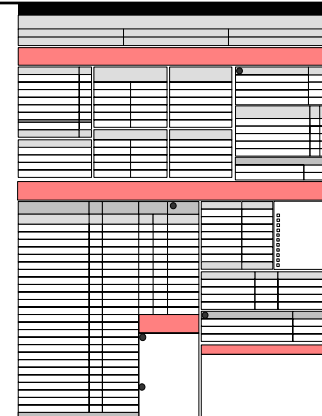


## To assess whole of the microsystem...

- Use Assessing Your Practice because it hits all 4 P's
  - Patients
  - People
  - Processes
  - Patterns



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# Know Your Patients Page 3

A large grid form with multiple columns and rows, intended for data entry related to patient information.

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# Know Your People

**B. Know Your People:** Create a comprehensive picture of your practice. Who does what? What hours are you open for business? How many and what is the duration of your appointment types? How many exam rooms do you currently have? What is the mix of your staff?

Current Staff	FTE	Comment/Function	Set Next Appointment	Cycle Time Range	Appointments	Notes/Comments	Do you offer any of the following? (over-views)
Office Manager/Receptionist					Monday		<input type="checkbox"/> Direct care
Physician					Tuesday		<input type="checkbox"/> E-mail
					Wednesday		<input type="checkbox"/> Direct care
					Thursday		<input type="checkbox"/> Phone follow-up
					Friday		<input type="checkbox"/> Disease registries
					Saturday		<input type="checkbox"/> Patient management
					Sunday		<input type="checkbox"/> Emergency/guidance
							<input type="checkbox"/>
NP/PA Total							
Office Staff							
Physician Total							
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Physician Total							



Margin after Costs	
\$17,966 (May 2003)	

Staff Satisfaction Score (as of Nov. '02) N=17		#
How stressful is the practice?	# Not	0 (0%)
Recommend CHC as great place to work	# agree	7 (41%)
Rate other people's attitudes about working at CHC, or their morale.	# Fair or poor	15 (88%)

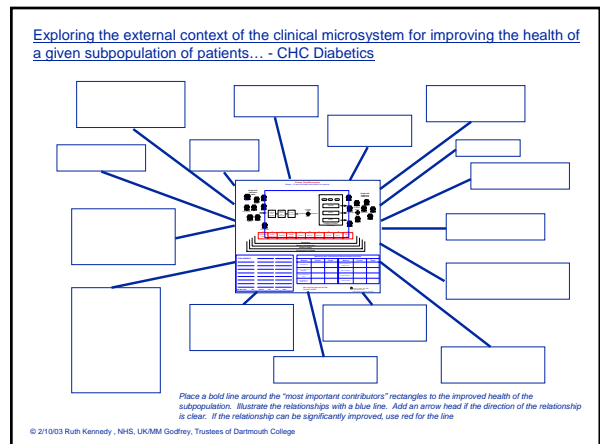
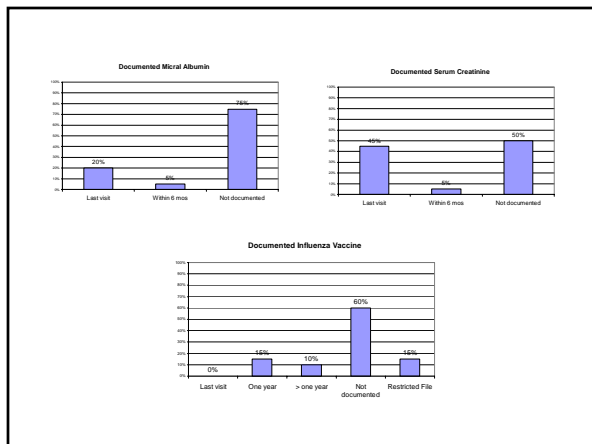
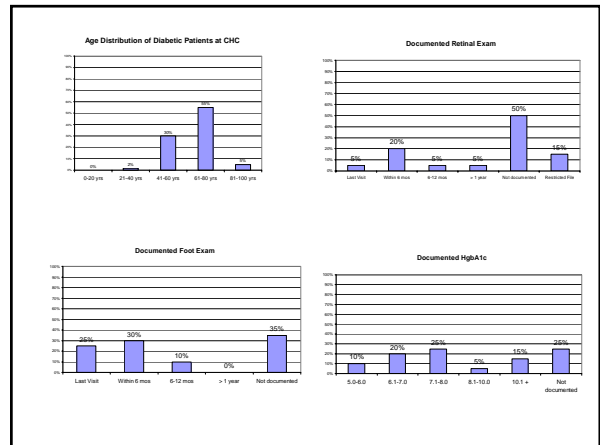
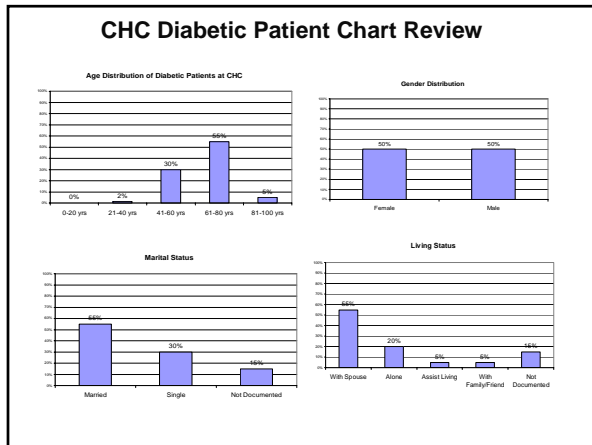
  

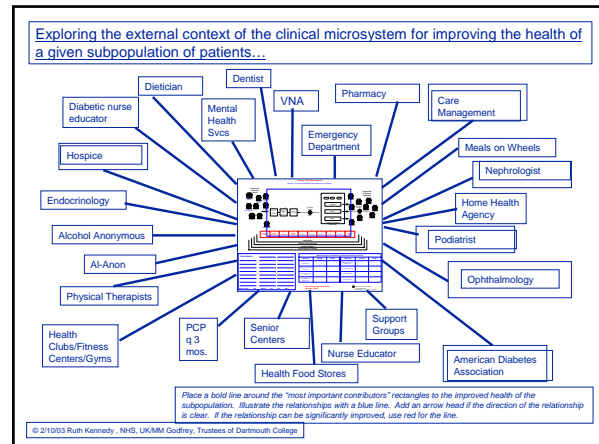
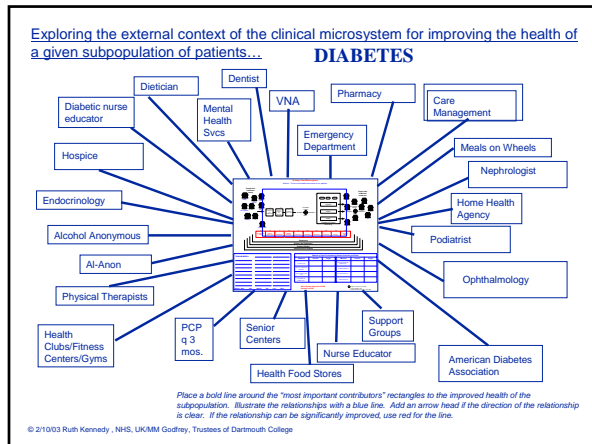
Current Team	FTE	Function	3 <sup>rd</sup> Next Avail	Cycle Time
			PE	New 62-94 FU 40-52
<b>MDs Total</b>	<b>6.0</b>			
Kathy	1.0	MD	18	1-2
Kevin	0.6	MD	23	1-2
Kris	0.6	MD	4	1-2
Pat	0.5	MD	26	5-7
Don	0.5	MD	42	5-7
Lou	0.5	MD	16	1-2
Allen	0.1	MD	13	6-7
Diane	0.1	MD	29	4-5
Cathy	0.1	MD	14	6-7
J.	1.0	MD	1	1
	1.0	MD	1	1
R.	1.0	MD	1	1
<b>NP/PA Total</b>	<b>2.0</b>			
Maureen	1.0	NP	7	1-2
Matthew	1.0	PA	1	1
<b>RN's Total</b>	<b>3.0</b>			
Tracy	1.0	RN		
Deb	1.0	RN		
Donna	1.0	RN		

Current Team	FTE	Function	Average RVU/visit	Panel Size
<b>MDs Total</b>	<b>6.0</b>			
Kelly	1.0	MD	1.12	1,489
Kevin	0.6	MD	1.0	1,913
Kris	0.6	MD	1.14	1,500
Pat	0.5	MD	1.18	1,098
Don	0.5	MD	1.15	1,155
Lou	0.5	MD	1.16	918
Allen	0.1	MD		166
Diane	0.1	MD		232
Cathy	0.1	MD		385
J.	1.0	MD		
	1.0	MD		
R.	1.0	MD		
<b>NP/PA Total</b>	<b>2.0</b>			
Maureen	1.0	NP	0.98	665
Matthew	1.0	PA		
<b>RN's Total</b>	<b>3.0</b>			
Tracy	1.0	RN		
Deb	1.0	RN		
Donna	1.0	RN		
<b>LPNs Total</b>	<b>.8</b>			
Jamie	.8	LPN		

Current Team	FTE	Function
<b>LNAs/MA Total</b>	<b>3.0</b>	
Dyana	1.0	CMA
Melissa	1.0	LNA
Vacant	1.0	LNA/Lab Tech
<b>Secretaries</b>	<b>4.0</b>	
Pamela	1.0	Administrative Supervisor
Penny	.6	Secretary
Becky	1.0	Secretary
Allison	1.0	Secretary
Kristina	.4	Secretary
<b>Others</b>	<b>2.4</b>	
Lindsay	1.0	Manager, Clinical Affairs
Debbie	0.4	Quality Improvement Staff
Michelle	1.0	Medical Records





## Treatment

- Why are we doing so poorly with our diabetic patients? Present data and brainstorm improvement ideas.
- What tools are already available?
- Need to identify our diabetics
- Right person needs to be doing the right thing at the right time
- Tracking system - Registry
- Nurse Education
- Shared Medical Appointments

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## Lessons Learned

- Utilize Resources (i.e. "Green Book", student interns)
- Engage Improvement Coach
- Share data – 'real time' feedback
- Data Wall
- Empower motivated staff (i.e. nurse, doctor, medical records assistant)
- Hold regular meetings with Agendas

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## Remember that every clinical microsystem must

- Do the job
  - meet patient's needs
- Meet staff needs
  - for respect, challenge, growth, joy, & earnings
- Maintain self as an organization
  - mission, values, finances, image

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## Summary

Health care organizations might not use the term *microsystem*, but it is clear that many high quality and cost-efficient providers are organizing themselves around functional front-line teams that have the right information at the right time to deliver the best care possible.

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