

## **Clinical Microsystem Assessment Diagnostic**

**Instructions:** This document was designed to help you improve your performance in the 10 success characteristics of high performing microsystems.<sup>1</sup> At the top of each page you will find a definition of each of the ten success characteristics associated with high performing Microsystems. The MS Assessment questions you completed during the first meeting follow. Two types of questions come next. The leadership diagnostic survey questions ask you to rate various aspects of that category, please work together to complete the questions. Finally, the open-ended questions should be reviewed and discussed as a leadership group. We will be asking these types of questions during our on-site meeting with you. Begin answering the questions starting with your lowest scores from the microsystem assessment and work your way up to your higher performance areas. There are references at the bottom of every page for you to review. They are specific to each category and you will find helpful tools and reading materials to improve each of the categories.

We suggest reading the Joint Commission Journal Articles as an introduction to Microsystems. Start with the first article that provides an overview of the work: **Part 1: Learning from High-Performing Front-line Clinical Units.** The Joint Commission Journal on Quality Improvement. Volume 28 (9): 472-493, 2002. © Nelson EC, Batalden PB, Huber TP, Mohr, JJ, Godfrey MM, Headrick, LA, Wasson, JH. This article and nine others can be found at <http://www.clinicalmicrosystem.org/publications.htm>, as well as other related publications. The ninth article on Microsystems is focused on an Intensive Care Nursery at DHMC and we encourage you to review it as well: **Part 9: Developing Small Clinical Units to Attain Peak Performance.** The Joint Commission Journal on Quality and Safety. Volume 29 (11):575-585. © Batalden PB, Nelson EC, Edwards WH, Godfrey MM, Mohr JJ: Microsystems in Health Care.

We look forward to continuing our work with you on improving your units performance and reducing nosocomial infections in your units. If you have any questions with regard to this document please feel free to contact me at [Thomaspatrick@mac.com](mailto:Thomaspatrick@mac.com), or (415) 350 2288.

Kind Regards,

Thomas Huber, MS ECS

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<sup>1</sup> The initial microsystem assessment tool was developed by Julie Mohr. The microsystem concept was developed by a group of researchers at Dartmouth Medical School headed by Paul Batalden and Gene Nelson. The team has been researching and improving Microsystems for more than 10 years. John Wasson and Margie Godfrey and others have worked to improve Microsystems throughout the United States and Northern Europe. I am grateful to be part of the microsystem work and continue my interest in healthcare improvement with this concept. This document builds on the prior work and research and was developed to help microsystems improve their performance in the 10 success characteristics.





**3. Staff Focus:** *There is selective hiring of the right kind of people. The orientation process is designed to fully integrate new staff into culture and work roles. Expectations of staff are high regarding performance, continuing education, professional growth, and networking.*

1	2	3	4	5
We don't regularly make staff feel as valued members of the Microsystem. We don't have a formal orientation for new staff. There is a lack of continued education and professional growth needs are not being met.	We make staff feel as valued members of the Microsystem, but the Microsystem is not doing all that it could to support education and training of staff, workload, and professional growth.	We make staff feel as valued members of the Microsystem and what they say matters. This is evident through staffing, education and training, workload, and professional growth.		

**Staff Focus Diagnostic Survey Questions:** Please complete the questions below your responses are very important to improving your unit performance.

- a. Our hiring process is highly selective and potential staff are interviewed by our current staff to make sure the cultural fit is right.  

1	2	3	4	5
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- b. Our orientation process is designed to fully integrate new staff into our unit culture and work roles.  

1	2	3	4	5
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- c. We meet regularly to evaluate staff performance and set high standards with regard to continuing education and professional growth.  

1	2	3	4	5
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- d. Staff members feel as valued members of the unit and their input is very important to our way of doing the work.  

1	2	3	4	5
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- e. We carefully align professional competencies with the work of the unit.  

1	2	3	4	5
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**Open Ended Questions:** Please review the questions below and discuss them during a leadership meeting. We will ask these kinds of questions during our on-site visit with you.

- f. What is your hiring process? Please describe the hiring process.
- g. How are new staff members oriented to the unit? Please describe the orientation process.
- h. How are staff members evaluated on their performance? How often is staff member performance reviewed? During the evaluation is continued education and professional growth considered? If so how?
- i. How do you incorporate staff input and ideas into the functioning of the unit? Please give one example of this.
- j. How do you align professional competency and work roles in your unit?

**Reference Materials:**

1. **Part 8: Developing People and Improving Worklife: What Front-Line Staff Told Us.** The Joint Commission Journal on Quality and Safety. Volume 29 (10):512-522. Reprinted with Permission. © Huber TP, Godfrey MM, Nelson EC, Mohr JJ, Campbell C, Batalden PB. Microsystems in Health Care.

2. Microsystem Action Guide: Pg. 102: Health Professional Education

**4. Education and Training:** *All clinical Microsystem staff members have the responsibility for ongoing education and training of staff and for aligning daily work roles with training competencies. Academic clinical Microsystems have the additional responsibility of training students.*

1                      2                      3                      4                      5

Training is accomplished in disciplinary silos, e.g., nurses train nurses, physicians train residents, etc. The educational efforts are not aligned with the flow of patient care, so that education becomes an add-on.	We recognize that our training could be different to reflect the needs of our Microsystem, but we haven't made many changes yet. Some continuing education is available to everyone.	There is a team approach to training, whether we are training staff, nurses or students. Education and patient care are integrated into the flow of work. Continuing education for all staff is recognized as vital to our continued success.
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**Education and Training Diagnostic Survey Questions:** Please complete the questions below your responses are very important to improving your unit performance.

- a. We are very satisfied with our current training and teaching in our unit.  

1	2	3	4	5
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- b. We have a team approach to knowledge building. Training is interdisciplinary and occurs at all levels of the unit.  

1	2	3	4	5
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- c. Our educational efforts are tied to the flow of patient care. Our training occurs in real-time and at the bedside.  

1	2	3	4	5
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- d. Continuing education and education is part of the ongoing work of the microsystem.  

1	2	3	4	5
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- e. Resources are available to all staff members for ongoing education and training.  

1	2	3	4	5
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**Open Ended Questions:** Please review the questions below and discuss them during a leadership meeting. We will ask these kinds of questions during our on-site visit with you.

- f. How is the current training and education in your unit accomplished?
- g. Is training accomplished by disciplinary silos, or do you have a team approach to knowledge building? Please describe.
- h. Are your educational efforts tied to the flow of patient care? Please describe.
- i. How is continuing education made part of the work of the microsystem?
- j. Are resources available to all staff members for ongoing education and training? Please describe.

**Reference Materials:**

1. **Part 8: Developing People and Improving Worklife: What Front-Line Staff Told Us.** The Joint Commission Journal on Quality and Safety. Volume 29 (10):512-522. Reprinted with Permission. © Huber TP, Godfrey MM, Nelson EC, Mohr JJ, Campbell C, Batalden PB. Microsystems in Health Care.

2. Microsystem Action Guide: Pg. 102: Health Professional Education

**5. Interdependence:** *The interaction of staff is characterized by trust, collaboration, willingness to help each other, appreciation of complementary roles, respect and recognition that all contribute individually to a shared purpose.*

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Staff members work independently and are responsible for their own part of the work. There is a lack of collaboration and a lack of appreciation for the importance of complementary roles.	The care approach is interdisciplinary, but we are not always able to work together as an effective team.	Care is provided by an interdisciplinary team characterized by trust, collaboration, appreciation of complementary roles, and a recognition that all contribute individually to a shared purpose.
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**Interdependence of Care Team Diagnostic Survey Questions:** Please complete the questions below your responses are very important to improving your unit performance.

- a. The care approach in our unit is characterized by collaboration and an appreciation for complementary roles.  

1                      2                      3                      4                      5
- b. There is a great respect and recognition that all staff members contribute to a shared purpose.  

1                      2                      3                      4                      5
- c. Our unit functions in multidisciplinary teams. Teamwork characterizes our way of doing our work.  

1                      2                      3                      4                      5
- d. Although individuals in our unit are held accountable for their contribution to our work, there is a strong willingness to help each other.  

1                      2                      3                      4                      5
- e. We have very good trust and respect among our various professional disciplines.  

1                      2                      3                      4                      5

**Open Ended Questions:** Please review the questions below and discuss them during a leadership meeting. We will ask these kinds of questions during our on-site visit with you.

- f. Tell us about your teamwork in the unit. How do your disciplines work together to deliver care?
- g. To what degree is there collaboration in the unit and an appreciation for complementary roles?
- h. Does everyone in your unit share a common purpose and goal? Are staff members aware of how they contribute to the mission of the unit?
- i. Give us an example of how your staff members exhibit a willingness to help each other.
- j. To what degree is there respect and trust between the professional disciplines in your unit?

**Reference Materials:**

- 1. Microsystem Action Guide
  - a. Pgs. 104-112: Meeting Skills
  - b. Pgs. 126-128: Ladder of Inference
  - c. Pgs. 129-131: Left Hand Column Exercise



**7. Community and Market Focus:** *The Microsystem is a resource for the community; the community is a resource for the Microsystem; the Microsystem establishes excellent and innovative relationships with the community.*

1	2	3	4	5
<p>We focus on the patients who come to our unit. We haven't implemented any outreach programs in our community. Patients and their families often make their own connections to the community resources they need.</p>	<p>We have tried a few outreach programs and have had some success, but it is not the norm for us to go out into the community or actively connect patients to the community resources that are available to them.</p>	<p>We are doing everything we can to understand our community. We actively employ resources to help us work with the community. We add to the community and we draw on resources from the community to meet patient needs.</p>		

**Community and Market Focus Diagnostic Survey Questions:** Please complete the questions below your responses are very important to improving your unit performance.

- a. We have developed several ways of connecting to our community, i.e., outreach programs.
 

1	2	3	4	5
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- b. Our unit is a resource for our community, and the community is a resource for our unit.
 

1	2	3	4	5
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- c. We constantly strive to find innovative ways of connecting with our larger organization.
 

1	2	3	4	5
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- d. We collect data on our community and have measures that tell us how well we are doing.
 

1	2	3	4	5
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- e. The larger organization provides us with adequate resources and financial support so that we can take better care of patients.
 

1	2	3	4	5
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**Open Ended Questions:** Please review the questions below and discuss them during a leadership meeting. We will ask these kinds of questions during our on-site visit with you.

- f. Tell us about some of your outreach programs, how are you currently connecting with your community?
- g. What kinds of services are you offering to the community?
- h. How often do you currently connect with your community?
- i. What kinds of data do you collect on your community outreach programs.
- j. How does your community support the work of the unit?

**Reference Materials:**

1. **Part 7: The Microsystem as a Platform for Merging Strategic Planning and Operations.** The Joint Commission Journal on Quality and Safety. Volume 29 (9):452-459. Reprinted with Permission. © Kosnik LK and Espinosa JA. Microsystems in Health Care.

**8. Performance Results:** *Performance focuses on patient outcomes, avoidable costs, streamlining delivery, using data feedback, promoting positive competition, and frank discussions about performance.*

1                      2                      3                      4                      5

We don't routinely collect data on the process or outcomes of the care we provide.	We often collect data on the outcomes of the care we provide and on some process of care.	Outcomes (clinical, satisfaction, financial, technical, safety) are routinely measured, we feed data back to staff, and we make changes based on the data.
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**Performance Results Diagnostic Survey Questions:** Please complete the questions below your responses are very important to improving your unit performance.

- a. We routinely measure outcomes on patient care and avoidable costs to streamline delivery processes.
 

1                      2                      3                      4                      5
- b. We routinely use data to improve the work of our unit across a variety of cost and quality metrics.
 

1                      2                      3                      4                      5
- c. We use a dashboard of metrics to assess the work of the unit, including clinical, satisfaction, financial, technical, and safety measures.
 

1                      2                      3                      4                      5
- d. We utilize performance metrics in our conversations with staff members about how are unit is doing.
 

1                      2                      3                      4                      5
- e. We utilize our performance metrics in our discussions with the larger organization to report back how the unit is operating, i.e., cost and quality data.
 

1                      2                      3                      4                      5

**Open Ended Questions:** Please review the questions below and discuss them during a leadership meeting. We will ask these kinds of questions during our on-site visit with you.

- f. What kinds of performance data do you currently collect on the functioning of your unit, i.e., clinical, process, satisfaction, quality, financial metrics?
- g. How do you utilize any data that your gather on the functioning of the unit?
- h. Do you share performance metrics with you staff? If yes, how so.
- i. Do you share performance metrics with your larger organization? If yes, how so.
- j. What kind of additional measures would you like in terms of improving your unit performance assessment?

**Reference Materials:**

1. **Part 7: The Microsystem as a Platform for Merging Strategic Planning and Operations.** The Joint Commission Journal on Quality and Safety. Volume 29 (9):452-459. Reprinted with Permission. © Kosnik LK and Espinosa JA. Microsystems in Health Care.
2. **Part 9: Developing Small Clinical Units to Attain Peak Performance.** The Joint Commission Journal on Quality and Safety. Volume 29 (11):575-585. Reprinted with Permission. © Batalden PB, Nelson EC, Edwards WH, Godfrey MM, Mohr JJ: Microsystems in Health Care.
3. **Microsystem Action Guide:** Pgs. 70 – 82: Measurement and Monitoring, Feed Forward and Feedback, Balanced Scorecard/Instrument Panels, Clinical Value Compass, Pgs. 132-140: Performance Measure

**9. Process Improvement:** *An atmosphere for learning and redesign is supported by the continuous monitoring of care, use of benchmarking, frequent tests of change, and a staff that has been empowered to innovate.*

1	2	3	4	5
The resources required (in the form of training and financial support, and time) are rarely available to support improvement work. Any improvement activity we do are in addition to our daily work.	Some resources are available to support improvement work, but we don't use them as often as we could. Change ideas are implemented without much discipline.			There are ample resources to support continual improvement work. Studying measuring and improving care in a scientific way are essential parts of our daily work.

**Process Improvement Diagnostic Survey Questions:** Please complete the questions below your responses are very important to improving your unit performance.

- a. Studying, measuring, and improving care are essential parts of our daily work.  

1	2	3	4	5
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- b. We have an atmosphere of learning and redesign supported by continuous monitoring of care, use of benchmarking, and frequent tests of change.  

1	2	3	4	5
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- c. Our staff members are empowered to innovate and improve our care processes.  

1	2	3	4	5
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- d. We have done flowcharting of our care processes and have shared key process measures with our staff to improve the work in our unit.  

1	2	3	4	5
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- e. We often use quality improvement tools and techniques to improve our unit performance, i.e., fishbone diagrams, PDSA cycles, and flowcharting.  

1	2	3	4	5
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**Open Ended Questions:** Please review the questions below and discuss them during a leadership meeting. We will ask these kinds of questions during our on-site visit with you.

- f. How do you currently use quality improvement techniques and tools to improve your unit's performance?
- g. Have you ever flowcharted key clinical processes? If yes, tell us about how you utilized this approach to improve care.
- h. Do you currently train your staff in quality improvement? How is the training done?
- i. Tell us about your redesign work in your unit. How do you use benchmarking and tests of change (PDSA)?
- j. How are staff members empowered to innovate and make ongoing changes in the unit?

**Reference Materials:**

**1. Part 1: Learning from High-Performing Front-line Clinical Units.** The Joint Commission Journal on Quality Improvement. Volume 28 (9): 472-493, 2002. Reprinted with Permission. © Nelson EC, Batalden PB, Huber TP, Mohr, JJ, Godfrey MM, Headrick, LA, Wasson, JH: Microsystems in Health Care. 2. Microsystem Action Guide: Pgs. 20-24: Building your own microsystem diagram. Pgs. 24-59: Understanding core processes of clinical Microsystems, Pgs 116-122: Flowcharting (Process Mapping)

**10. Information and Information Technology:** *Information is the connector – staff to patients, staff to staff. Technology facilitates effective communication and multiple formal and informal channels are used to keep everyone informed all the time, listen to everyone’s ideas, and ensure that everyone is connected on important topics.*

Given the complexity of information and the use of technology in the Microsystem, assess your Microsystem on the following three characteristics (1) integration of information with patients, (2) integration of information with providers and staff, and (3) integration of information with technology.

1	2	3	4	5
Patients/Family have access to some standard information that is available to all patients and family.	Patients/Family have access to standard information that is available to all patients/Family. We’ve started to think about how to improve the information they are given to better meet patient needs.	Patients/Family have a variety of ways to get the information they need and it can be customized to meet their individual learning styles. We routinely ask patients/family members for feedback about how to improve the information given to them.		

1	2	3	4	5
I am always tracking down the information I need to do my work.	Most of the time I have the information I need, but sometimes essential information is missing and I have to track it down.	The information I need to do my work is available when I need it.		

1	2	3	4	5
The technology I need to facilitate and enhance my work is either not available to me, or it is available but not effective. The technology we currently have does not make my job easier.	I have access to technology that will enhance my work, but it is not easy to use and seems to be cumbersome and time consuming.	Technology facilitates a smooth linkage between information and patient care by providing timely, effective access to a rich information environment. The information environment has been designed to support the work of the clinical unit.		

**Information and Information Technology Diagnostic Survey Questions:** Please complete the questions below your responses are very important to improving your unit performance.

- a. We have the right information available at the right time to treat patients. Our information technology gives us the right information at the right time.
 

1	2	3	4	5
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- b. We have the right information available at the right time between our staff members. Communication happens in real-time and staff members are informed in a rich information environment.
 

1	2	3	4	5
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- c. The information environment has been set-up to support the functioning of the unit, we have the right information at the right time to do our work.
 

1	2	3	4	5
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- d. The larger organization provides us with the right information technology updates and provides good communication with us about changes that come up.
- 1                      2                      3                      4                      5
- e. There is effective communication and information patterns with multiple formal and informal information channels.
- 1                      2                      3                      4                      5

**Open Ended Questions:** Please review the questions below and discuss them during a leadership meeting. We will ask these kinds of questions during our on-site visit with you.

- f. In what ways does the information environment (communication and information technology) support the functioning of the unit?
- g. Does the larger organization provide you with an information environment that allows you to take great care of patients?
- h. What are your primary means of communicating changes and news with the rest of your staff?
- i. Do you have the right information available at the right time to take care of patients?
- j. What changes are you currently thinking about in terms of the information environment. If you don't have current plans, what kinds of changes would you consider?

**Reference Materials:**

1. **Part 2: Creating a Rich Information Environment.** The Joint Commission Journal on Quality and Safety. Volume 29 (1): 5-15, 2003. Reprinted with Permission. © Nelson EC, Batalden PB, Homa K, Godfrey MM, Campbell C, Headrick LA, Huber TP, Mohr JJ, Wasson JH: Microsystems in Health Care.