

KNOWLEDGE NETWORKS: Transforming Healthcare



“No industry will be more affected by technology than healthcare.”

Don Tapscott, *The Digital Economy*



Lynda Trommelen
<http://www.peoplepuzzles.net>

Today's Reality

Health Care Environment

- Restructuring has created a “brain drain”
 - Need for a “seamless system”
 - Multi-site facilities
 - Interconnection between providers
 - “Just in Time Learning”
 - Tell me what I need to know – NOW!
- As the demand for knowledge increases, the shelf life of knowledge decreases – Networks are becoming the tool for up to date information.



Health Care is a Knowledge based sector that relies on the up to date knowledge of its professionals. Technology enables the redesign of the system.

Issues Unique to Health Care



- Legal ownership / confidentiality of the patient record
- Variance of technology across the system
- Health organizations structure differs from the private sector



The more we learn about what we're doing, the more we can do. Organizations need to rely on each other as individuals and teams. No one person can achieve everything.

Sherri Leopard in The Digital Economy

Internet Users

1983 – 2,000
1986 – 8,000
1988 – 100,000
1990 – 1,000,000
1993 – 8,192,000
1995 – 20,000,000
1998 – 200,000,000
1999 – 400,000,000
2001 – 1,000,000,000
2005 – 4,000,000,000



Are you connected?

Technology is Driving Change: *A Case Example from Health Care*

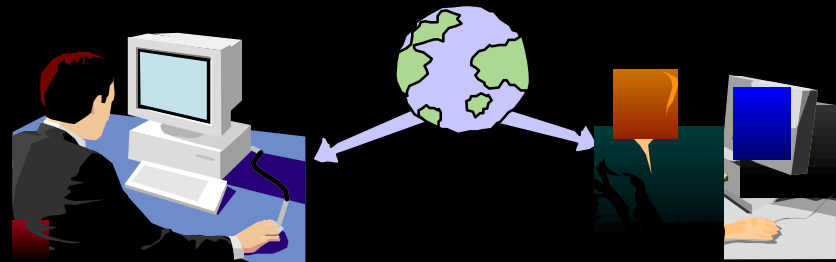
Web Sites in Ontario's 170 Hospitals

- 40 (23%) in Mar/99
- 63 (38%) in Oct/99

US Physicians Using the Internet

1996 - 7% online

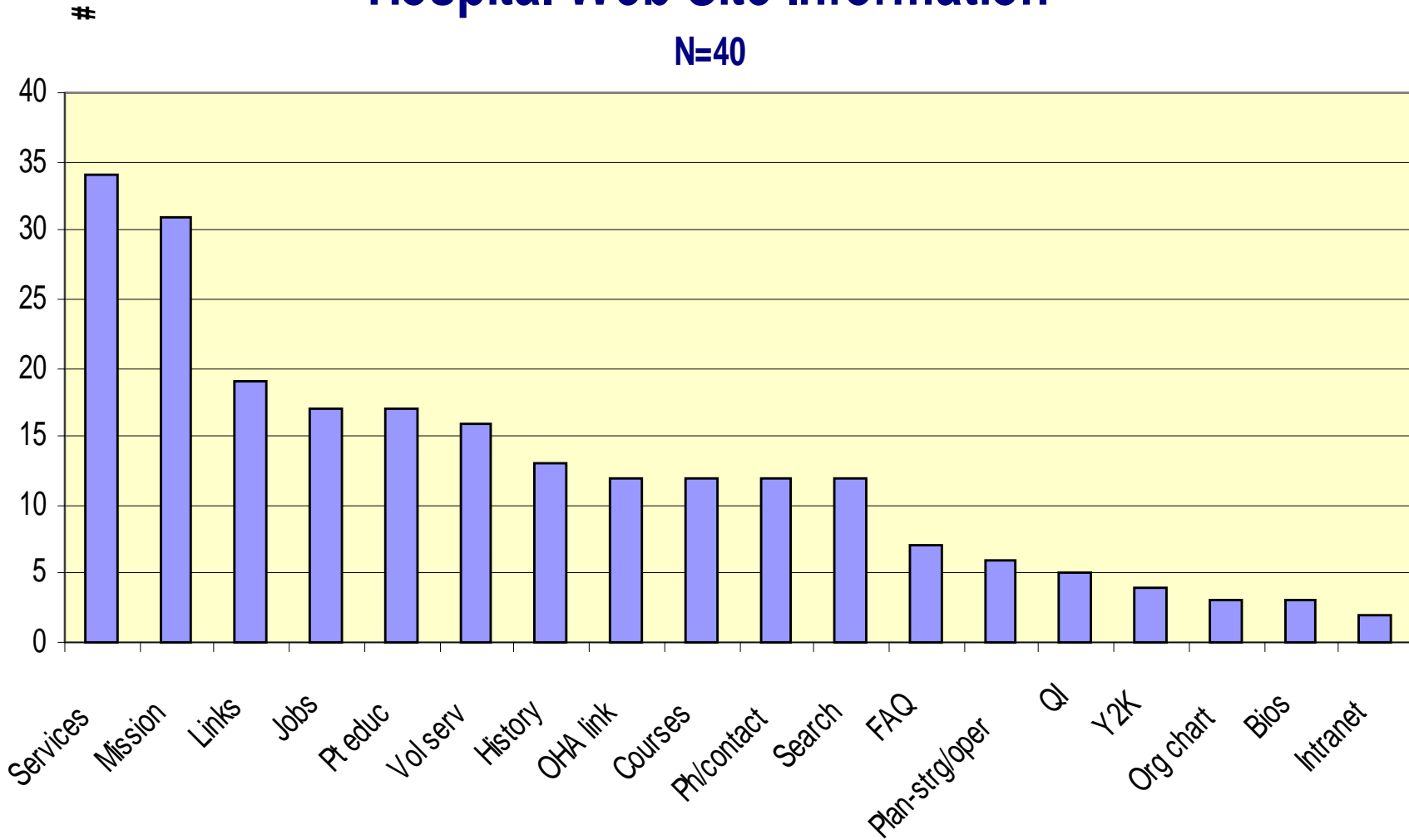
1999 - 85% online



OHA Hospital Web Sites

Hospital Web Site Information

N=40



Opportunities Exist to:

- Share knowledge across systems through the use of technology

- Redesign and create Knowledge Networks



- Apply this framework to build Knowledge Networks to plan, share best practices, educate and learn from each other.

Benefits Demonstrated from the Private Sector

- Knowledge Managers estimate improvements of 10 – 90% have been demonstrated in:
 - Recruitment, retention,
 - Response time for solving problems
 - Customer satisfaction
 - Avoidance of problems
- Ford Motor Company realized over \$950M in value through the implementation of Knowledge Management over 3 years.

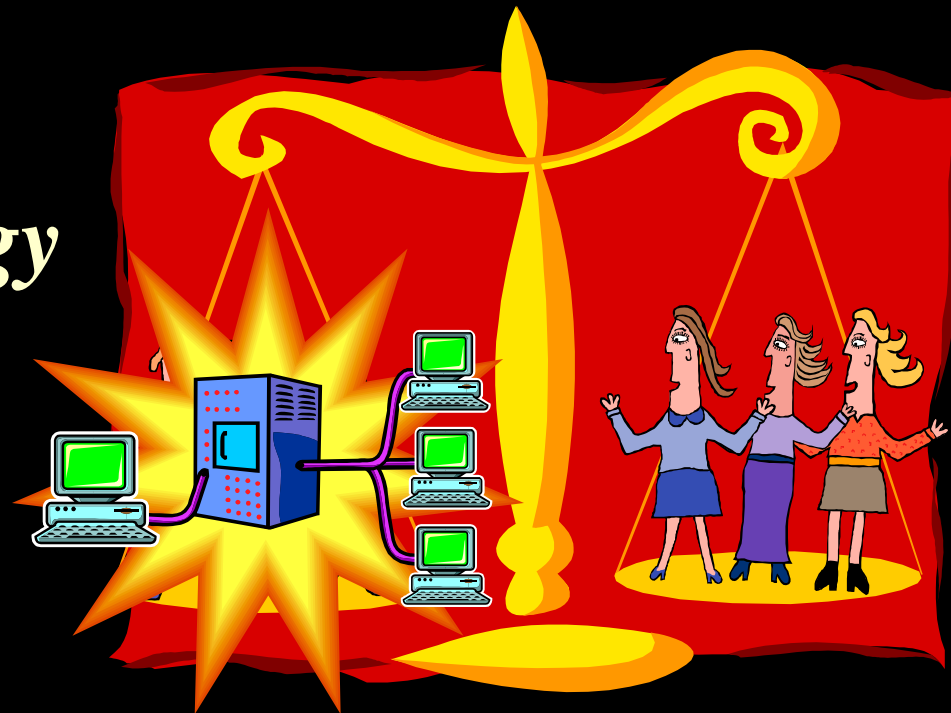


Knowledge Organizations

Balance

Technology

Culture



Cultural Shift



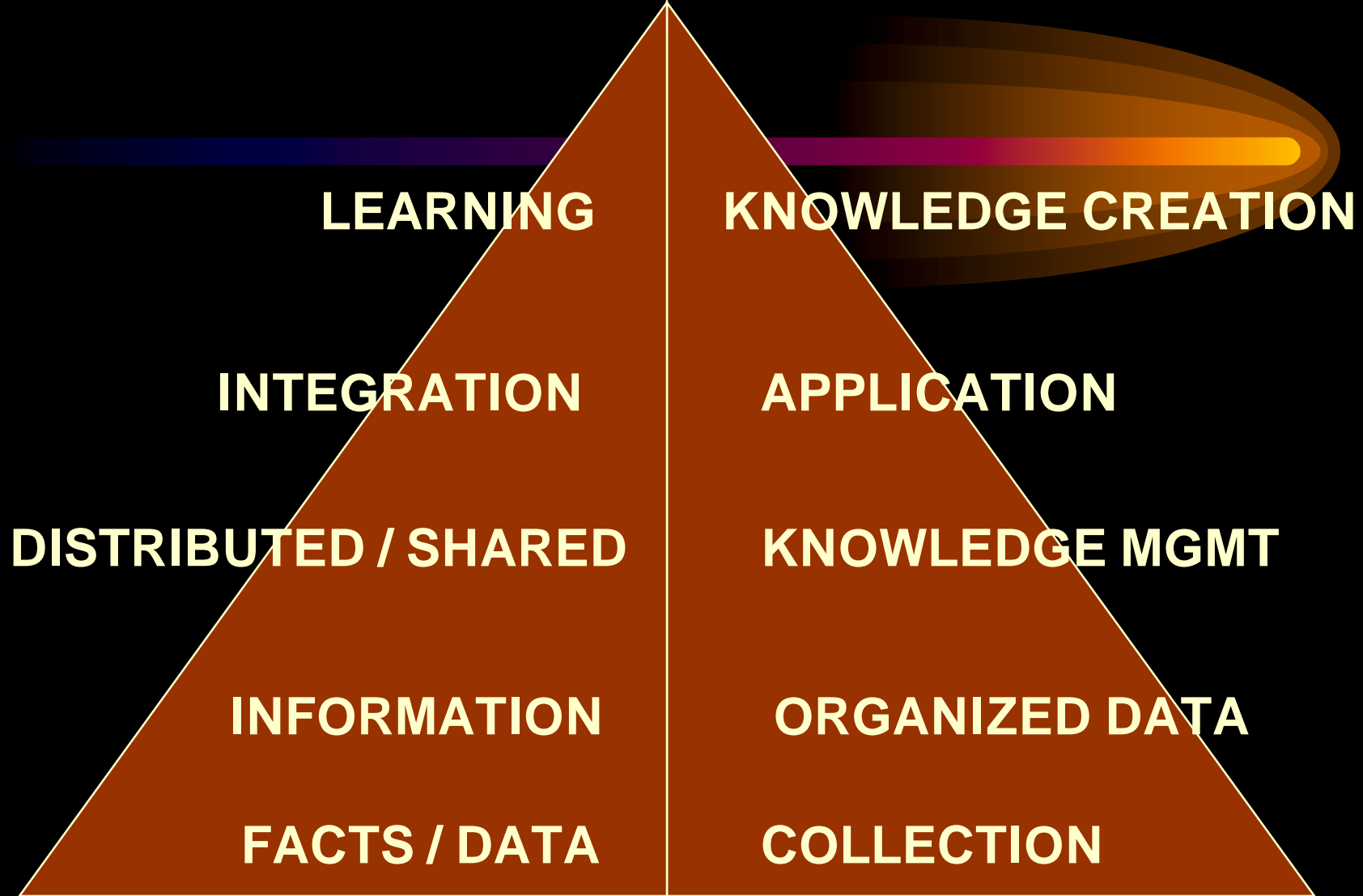
OLD PARADIGM

- Knowledge is power
- Limited / restricted access to information
- Ideas driven from the top of the organization
- Supports silos of information

KNOWLEDGE PARADIGM

- Shared knowledge is power
- Broad based sharing of information
- Everyone has a voice; input is valued & encouraged
- Knowledge blurs & breaks through barriers

KNOWLEDGE INNOVATION



A decorative graphic consisting of a horizontal line with a gradient from dark purple to bright yellow, tapering into a large, stylized arrowhead shape pointing to the right. The arrowhead is filled with a gradient from dark brown to bright yellow.

OHA web site

- Knowledge Management:
 - advocacy, research, databases, collaboration

Multi-site Partnerships



Huron Perth Hospital Partnership

- 8 Geographically separate facilities
- Regional co-ordinators in core services
- Diverse technology

Working Together On-line

Examples of Communities of Practice

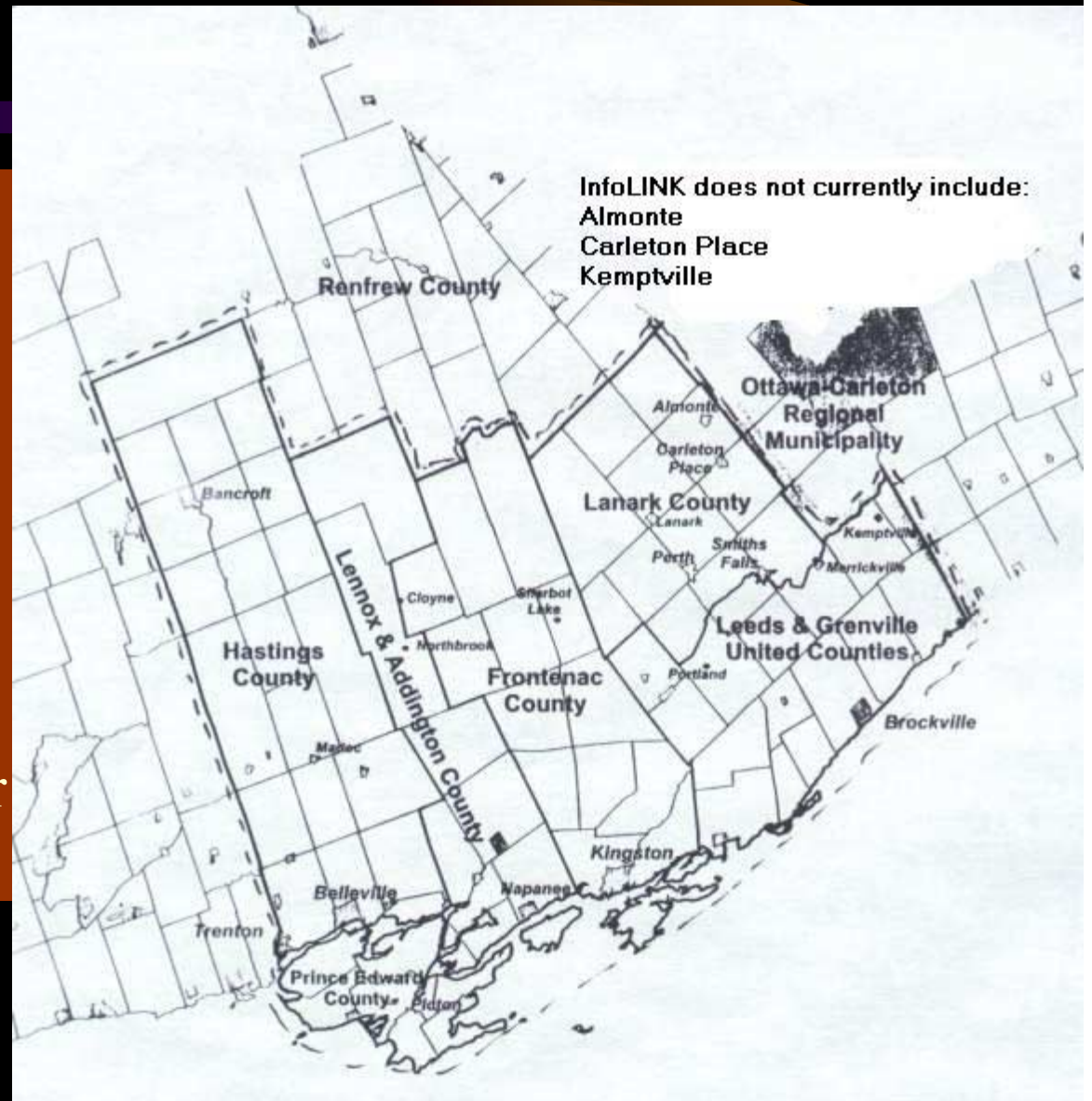
- Educators – Online Courses
- Professional Groups
- Technology Groups
- Community Groups



Health Care Network of SE Ontario

A Partnership of:

- 7 hospital corporations
- District Health Council
- 3 Community Care Access Centres
- 3 Public Health Units
- Queen's University
- HIP- Eastern Ontario
- Kingston Regional Cancer Centre



HCNSEO



CEO Executive Committee

- Regional Planning
- Operating Plan
- Discharge & Ambulance Transport

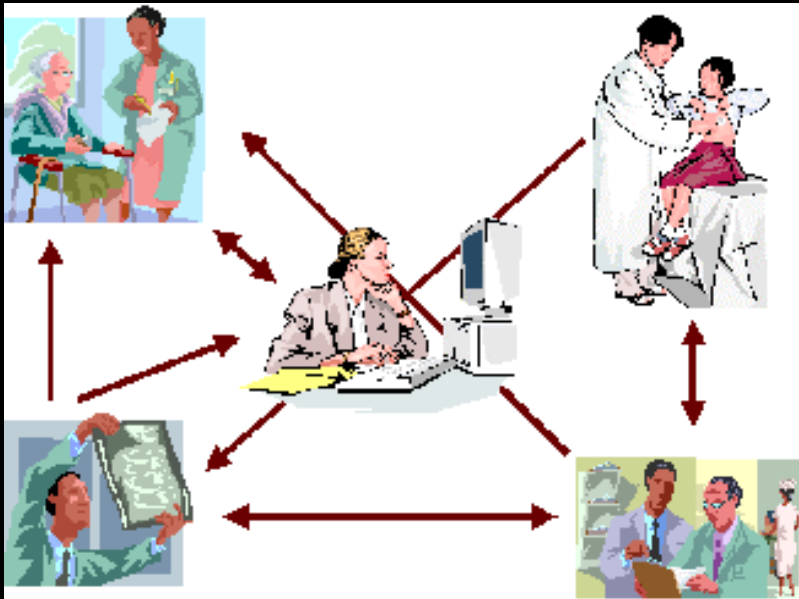
InfoLINK Alliance Management Committee

- Priority information sharing projects
- Broad community networks
- Prov/Natl forums

Integration Steering Committee

- Stroke strategy
- Cancer project
- CDN projects
- Cardiac catheterization

Infolink Alliance of Southeastern Ontario



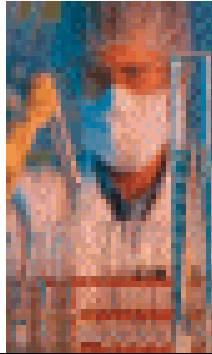
- was formed to establish a regional framework for the secure electronic transfer of health information among health service providers in Southeastern Ontario.

It is easier and more efficient to move information
than it is to move people.

Infolink Goals

- To improve health outcomes for consumers / patients by increasing timely access to and transfer of information at the time and place of health care delivery (ie: right care, right place, right time).
- To help health care providers avoid duplication of services and procedures





Goals

✦ To promote development and utilization, in collaboration with regional providers and organizations, standards and common data definitions.

- To assist health care providers to make informed decisions about patient care by providing timely access to information about the latest treatment methods.

Infolink Goals



- To assist health care providers to make informed decisions about patient care by providing timely access to information about the latest treatment methods.

When people work with their minds, they transform the system.



Sharing ideas, through
Knowledge Networks, turns
possibilities into realities.

Are you ready?