

# Informatics, Quality, and Practice

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# Learning Outcomes

- Define Nursing Informatics
- Translate quality into the role of the nurse informatics
- Examine how informatics supports the practice of the clinical nurse or the advanced practice nurse
- Critique personal human-computer interaction to promote wellness



# Informatics



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# Health Informatics

- Information Management
  - Information processing
  - Information systems
- Improves Care Outcomes
- Multidisciplinary
- Health Care Settings
- Sciences
  - Behavioral
  - Information
  - Cognitive
  - Computer
  - Social
  - Management
  - Library



# Health Informatics Tools

- Technology
- Clinical Guidelines
- Formal Terminologies
- Information Systems
- Communication Systems

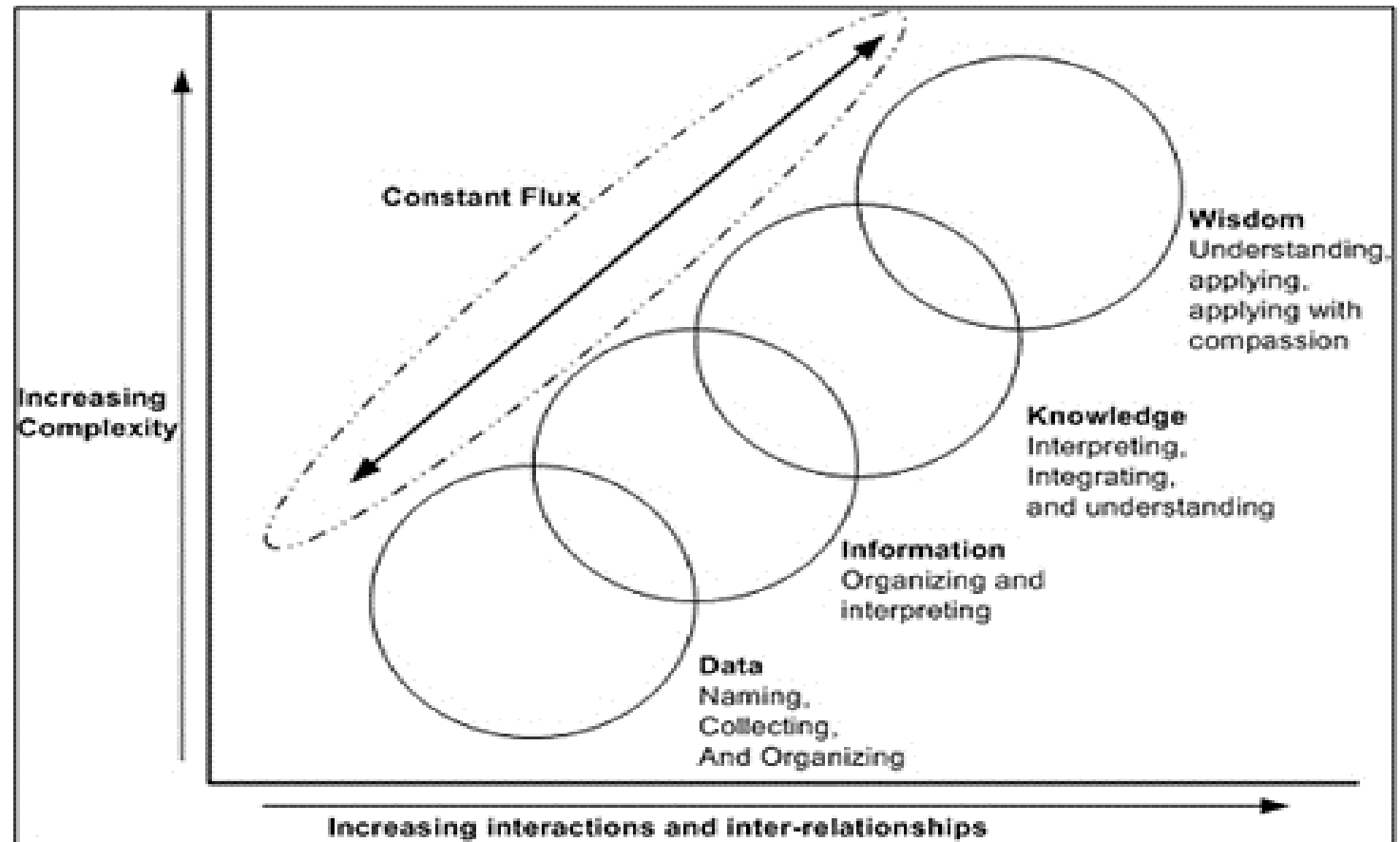


# Nursing Informatics

- Nursing Specialty
- Integrates Nursing Science
- Additional Sciences
- DIKW Framework



# Data to Wisdom



American Nurses Association and Nelson



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# The role of Quality



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# Quality, Outcomes, Safety

- NI Supports
  - Nurses
  - Patients
  - Consumers
  - Healthcare Team
- Roles to achieve desired outcomes
- Accomplished via Information
  - Structure, processing, technology



# Informatics supports Practice



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# Clinical Nurse Informatics Competencies

Informatics &  
Roles

Internet  
Resources

Website  
Evaluation

Electronic  
Databases

Confidentiality  
& Privacy

Security

Electronic  
Health Records

Communication  
Online

Email

Social Media

Handheld  
Devices

Telehealth



# Clinical Practice

- Workflow
- Expert Knowledge
- Outcomes, Quality, Safety



# Personal Wellness



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# Computer Desk STRETCHES for Busy People

Your Imprint Here

Neck Roll



Close eyes. Drop ear to shoulder...hold. Roll chin across chest to other shoulder... hold. Repeat.

Hold all stretches for 3-5 breathing cycles. Repeat stretches on each side of the body. Stretch to the point of mild tension.

Overhead Reach



Inhale slowly and deeply, and raise arms overhead. Exhale completely and release. Repeat.

Shoulder Stretch



Grasp behind elbow, and gently press to lengthen stretch toward mid-back. Hold. Repeat other side.

Arm Stretch



Swing arm to side; forearm faces upward and fingers point backward...hold. Repeat other side.

Neck Glide



Keep head level, and gently glide chin straight back....hold. Repeat.

Always stretch gently using controlled movements. Discontinue exercise if you feel discomfort or pain and consult your healthcare professional.

Side Bend



Bend to one side... hold. Repeat other side.

Back Bend



Lean back gently with hands supporting lower back... hold. Repeat.

Vision Break



Place hands over eyes. Inhale and exhale slowly and completely. Return to work with energy and focus.

FitStrips

Foto FitStrip #FF-1 © 2008 The FitStrips Line

# BACK ON TRACK: REDUCING LOW BACK PAIN AT WORK



Stanford  
University  
Study

## Remaining in a static position

for a prolonged period of time, such as sitting all day, may not be conducive to a healthy back.



Low back pain is the most common cause of job-related disability; associated estimated healthcare, lost income, and productivity costs are in excess of

**\$85 billion.**



## SIT-STAND MOVEMENT MAY REDUCE PAIN.

Study found a statistically significant reduction in reports of current low back, neck, and upper back pain.

## STANDING IMPROVES FOCUS.

Participants using the sit-stand workstations reported that their pain interfered less with general activity and ability to concentrate.

**78%** of participants using the sit-stand workstations reported a pain free day by the conclusion of the study.



An increase in comfort began being reported approximately 15 days after introducing a sit-stand workstation.

# MORE MOVEMENT = LESS PAIN

[Research.ergotron.com](http://Research.ergotron.com)

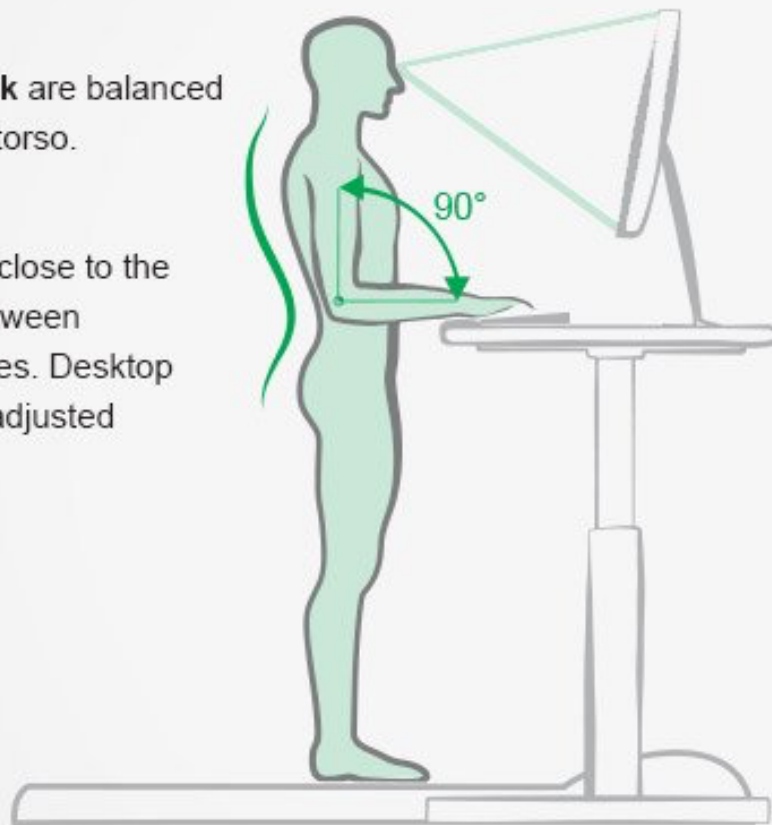
"Impact of a Sit-Stand Workstation on Chronic Low Back Pain: Results of a Randomized Trial," Journal of Occupational and Environmental Medicine (JOEM), Stanford University Study, 2016

**ERGOTRON®**

## 6 Tips for Proper Treadmill Desk Ergonomics

**1** **Head** and **neck** are balanced and in-line with the torso.

**2** **Elbows** are close to the body and bent between 90 and 120 degrees. Desktop height should be adjusted accordingly.



**3** Top of the monitor is at or just below eye level so the user does not have to tilt the head up or bend the neck down to see the monitor.

**4** **Shoulders** are relaxed.

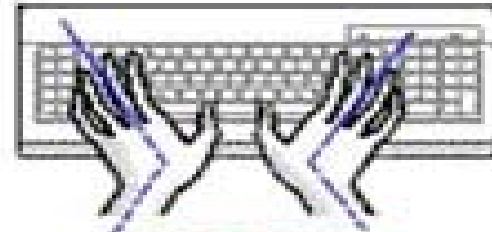
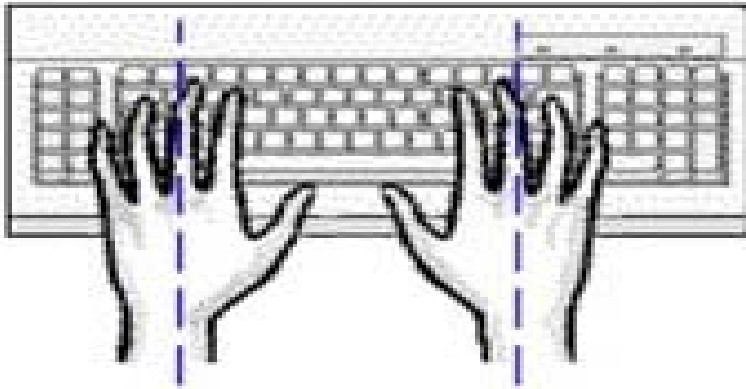
**5** **Wrists** and **hands** are straight, in-line, and roughly parallel to the floor.

**6** Adequate room for keyboard and mouse.

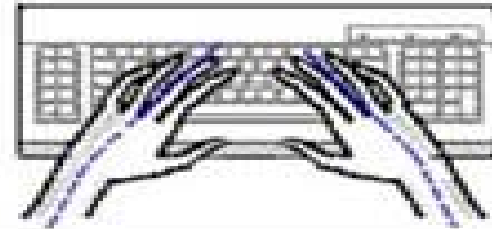




**RIGHT!**



**WRONG!**



**RIGHT!**



**WRONG!**



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# Thank You



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