# Of hat-tricks and elephants……

*Clinical Handover Workshop*

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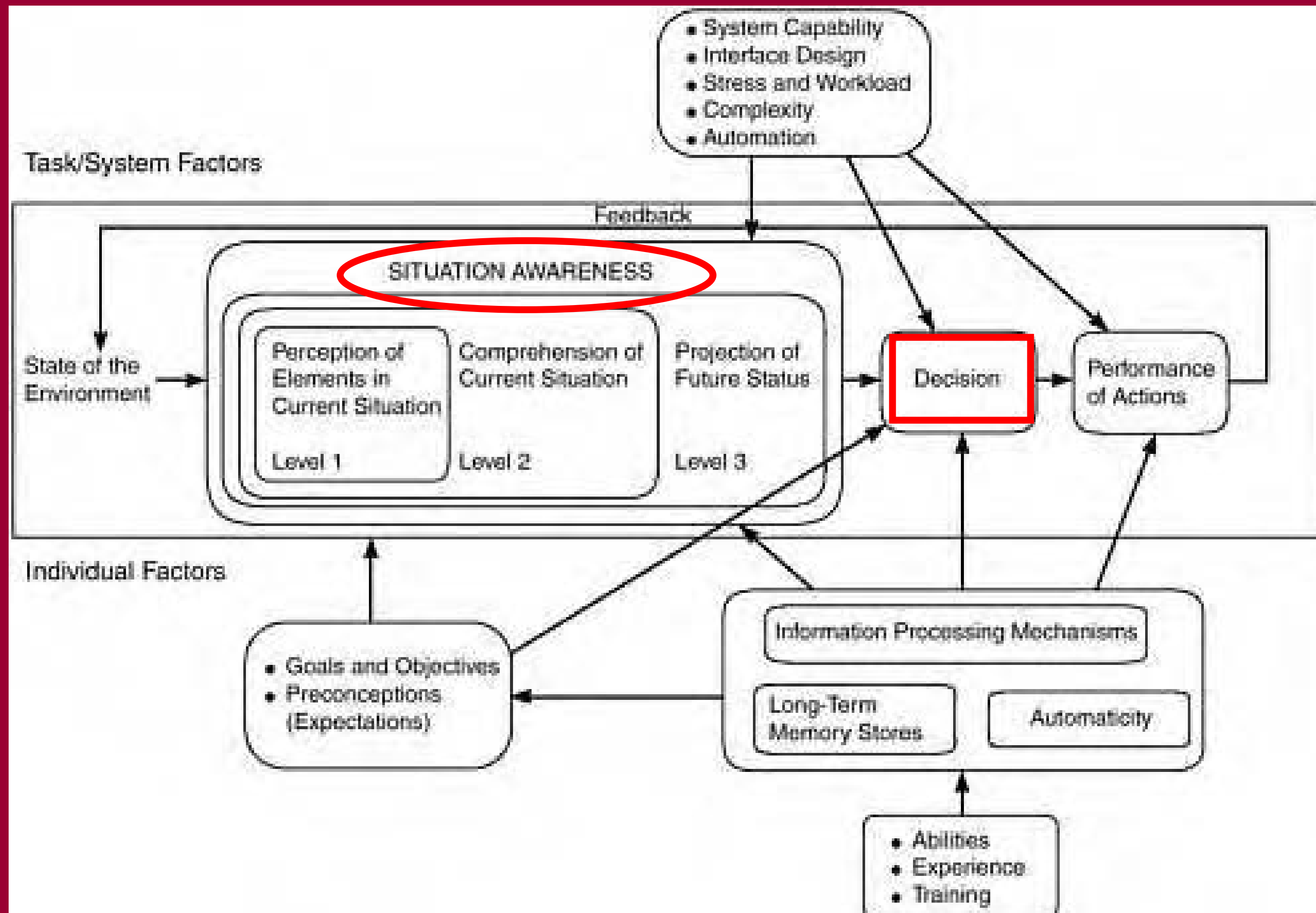
# Outline

- Transfers of care – increasingly frequent
- Examples of handover at Western Health
- What is needed for Effective Clinical Handover ?
- Current barriers

# It's simple – (but not easy !) ----
# Appropriate Clinical Decision Making



# Where's the evidence that Formal Clinical handover makes a significant difference to patient safety?

- Petersen LA, Orav EJ, Teich JM, et al. Using a computerized sign-out program to improve continuity of inpatient care and prevent adverse events. Jt Comm J Qual Improv. 1998;24:77-87
- Van Eaton EG, Horvath kd, Lober WB, et al. A randomized control trial evaluating the impact of a computerized rounding and signing-out system on continuity of care and resident work hours. J Am Coll Surg 2005:200:538-545.
- Aurora V, Johnson J, Lovinger D, et al. Communication failures in patient sign-out and suggestions for improvement: a critical incident analysis. Qual Saf Health Care 2005;14:401-407.
- Lee H, Levine JA, Schultz HJ. Utility of a standardized sign-out card for new medical interns. J Gen Intern Med 1996;11:753-755.
- Wilson RM, Harrison BT, Gibberd RW, et al. An analysis of the causes of adverse events from the Quality in Australian Health Care Study. MJA 1999;170: 411-415.
- Bates DW, Leape LL, Cullen DJ, et al. Effect of computerized physician order entry and a team intervention on prevention of serious medication errors. JAMA 1998;280:1311-1316.
- Bates DW, Gawande AA. Improving safety with information technology. New Eng J Med. 2003;348:2526-34

Sunshine
205 Acute, 75 Sub-acute beds + ED

Footscray
289 Acute, 25 Sub-acute beds + ED

Williamstown
Acute, Sub-acute beds

# More transfer of care than 1986

More transfers between hospitals

More transfers between units

More transfers between wards and their staff

More transfers between consultants within the same unit

More transfers between junior medical staff within the same unit

Shorter admissions → More admissions, Sometimes more readmissions

# More changes in staff than 1986

Shorter hours for junior medical staff

More specialization
→ more referrals

More locums and agency staff

More consultants

Shorter term rotations

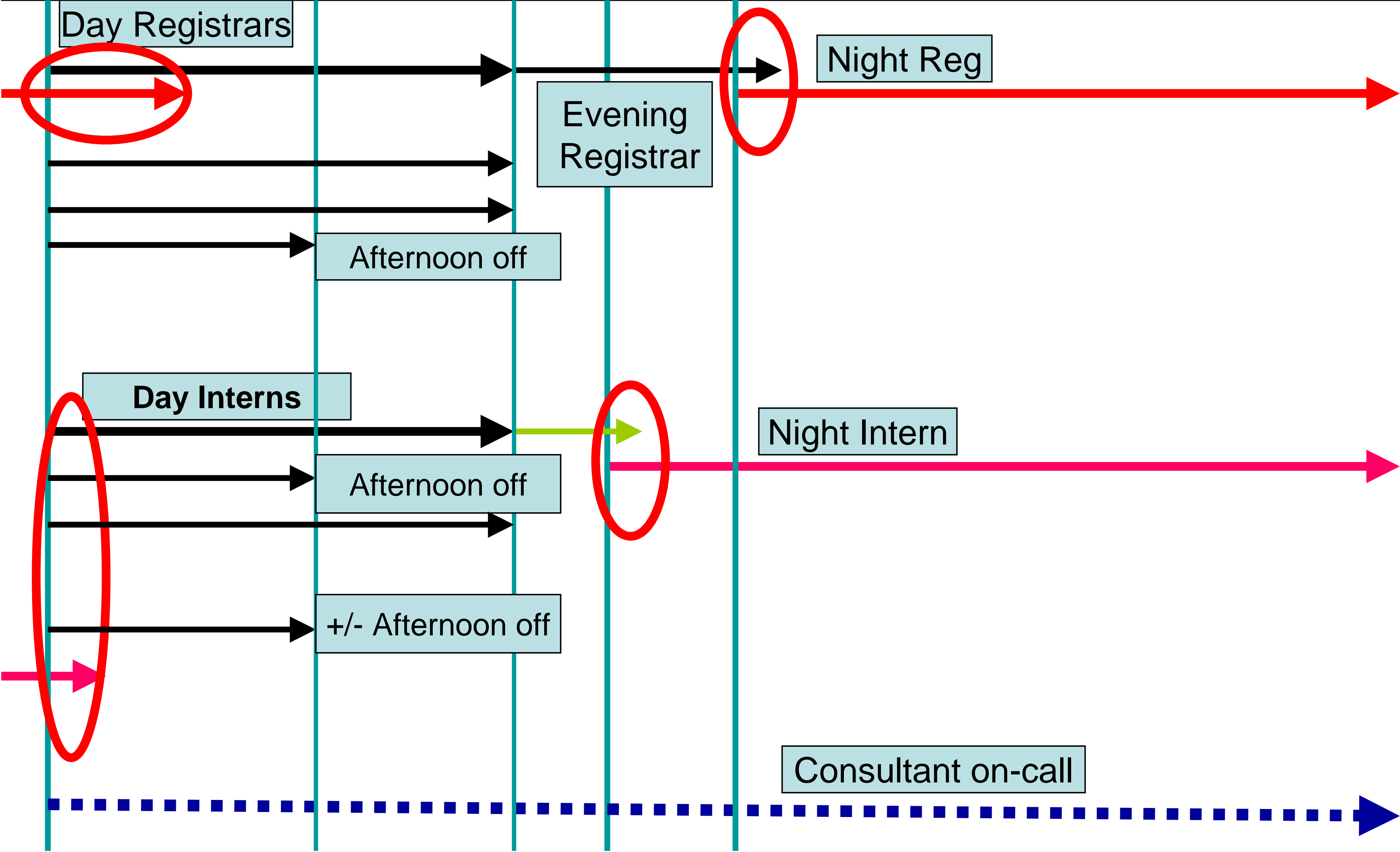
More frequent Leave – sick leave, study leave, conference leave, annual leave,
+ half days off

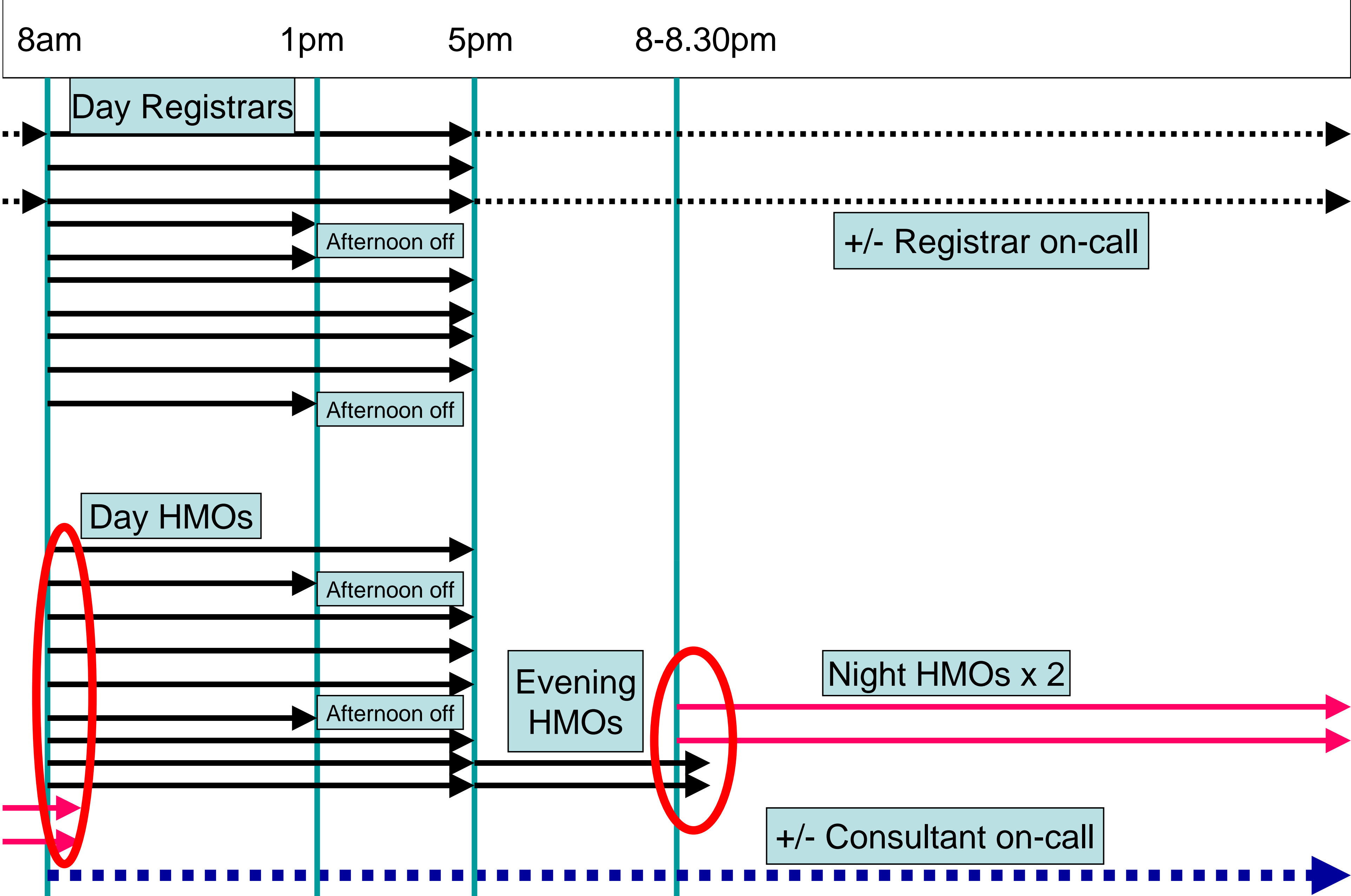
Rotating rosters within units within the same term

# “Medical” handovers at Footscray

- Each Unit has different process
- Medicine – different Units: General Internal Medicine and subspeciality units
- Surgery – general, colorectal, vascular, urology, orthopaedics, plastics
- Departments of ICU, ED
- Very low doctor/patient ratio after hours and weekends
- At least 3 “shift changes” per day for at least 2 different levels of seniority among medical staff

# ON SITE COVER – DIVISION OF MEDICINE – General Internal Medicine





ON SITE COVER – Division of Medicine – Subspecialities
8am
1pm
5pm
8-8.30pm
Day Registrars
Afternoon off
Afternoon off
+/- Registrar on-call
Day HMOs
Afternoon off
Afternoon off
Evening HMOs
Night HMOs x 2
+/- Consultant on-call

# On Site cover – Division of Surgery

- No formal Unit handover meeting
- Predominantly at registrar level
- Usually one to one
- Face to face or phone handover, may depend on Unit and location of doctor

# Emergency Departments

- Three EDs

- One has well developed “in-house” electronic handover software, tailored to its own ED environment

(Not used at other EDs)

**Handover Sheet / Division of Medicine / Subspecialities**
**Western Hospital Footscray**

**Date:** ___ / ___ / ________ ***Handover to be held in Residents Quarters between daily 0800 - 0830 hours, and at end of shift.***

**Doctor/Unit handing over**: ______________________________

*This sheet is to cover both* ***new admissions*** *or* ***transfers****,* ***unstable patients****, and* ***significant pending results to check****.*

| **Unit** (or bradma | **Patient/UR/Ward** (or bradma) | **Main Issues** | **Results to follow up** | **Plan** |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

# PATIENT PROBLEM LIST

For use by: General Internal Medicine and Infectious Diseases Unit Interns & Registrars at Western Hospital.
(Print this template onto standard hospital progress notes.)
To be referred to daily, and in conjunction with daily entry in progress notes.

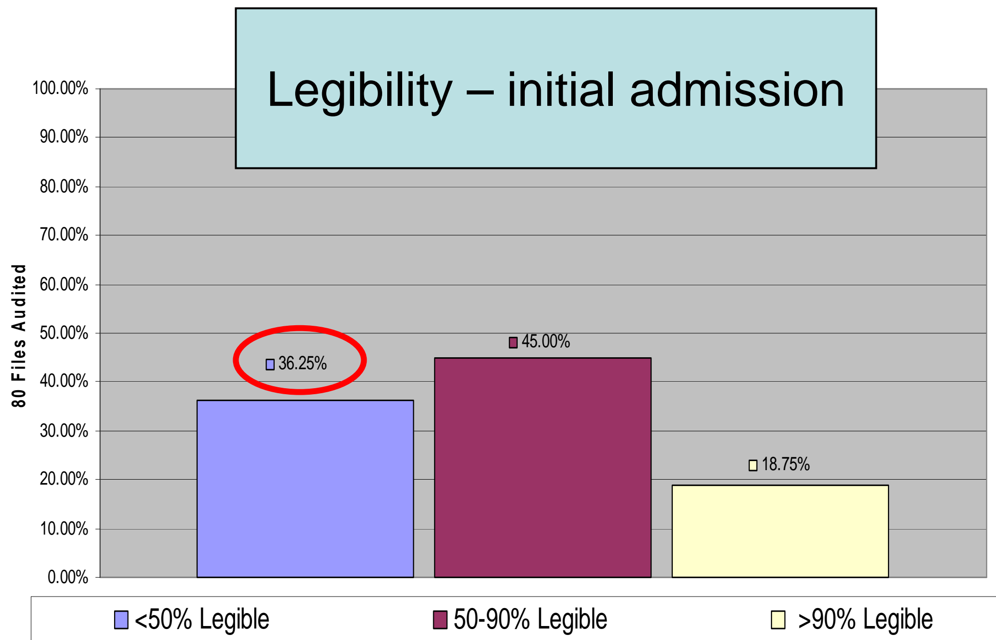
**Past Health**

| | |
|---|---|
| **1.** | **5.** |
| **2.** | **6.** |
| **3.** | **7.** |
| **4.** | **8.** |

| **Problems this admission** | **Updated problem (date/name)** |
|---|---|
| **1.** | |
| **2.** | |
| **3.** | |
| **4.** | |
| **5.**<br><br>If insufficient space, *use reverse side* | |
| **Social Issues** | |

**NFR status** (circle whichever is appropriate):

a. Has this been discussed with the patient, or relevant carer? **YES / NO**
b. Is the patient for resuscitation? **YES / NO**
c. If answer to "b" is "NO", has NFR form been completed? **YES / NO**


Legibility – initial admission
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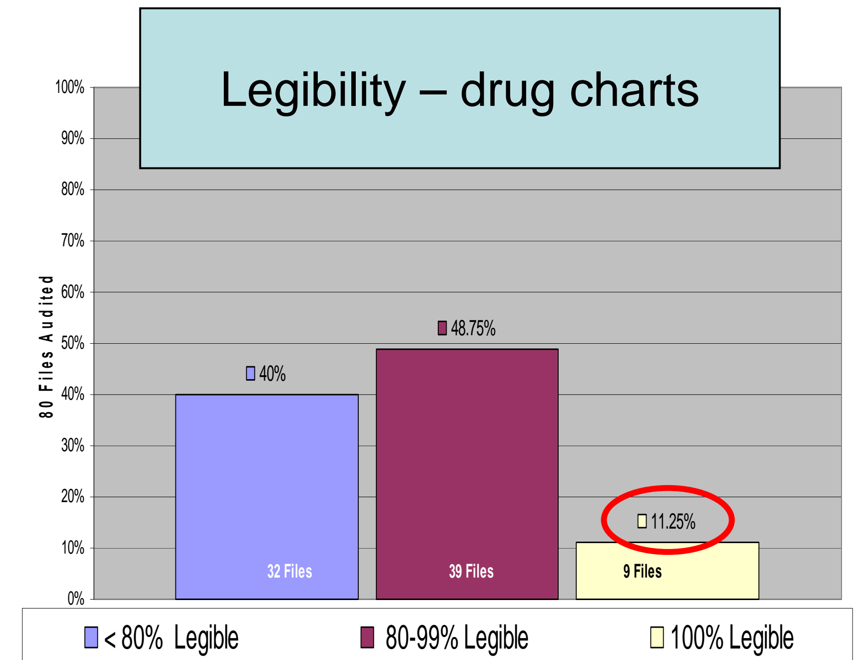
80 Files Audited
36.25%
45.00%
18.75%
<50% Legible
50-90% Legible
>90% Legible


Legibility – drug charts
100%
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80%
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50%
40%
30%
20%
10%
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48.75%
11.25%
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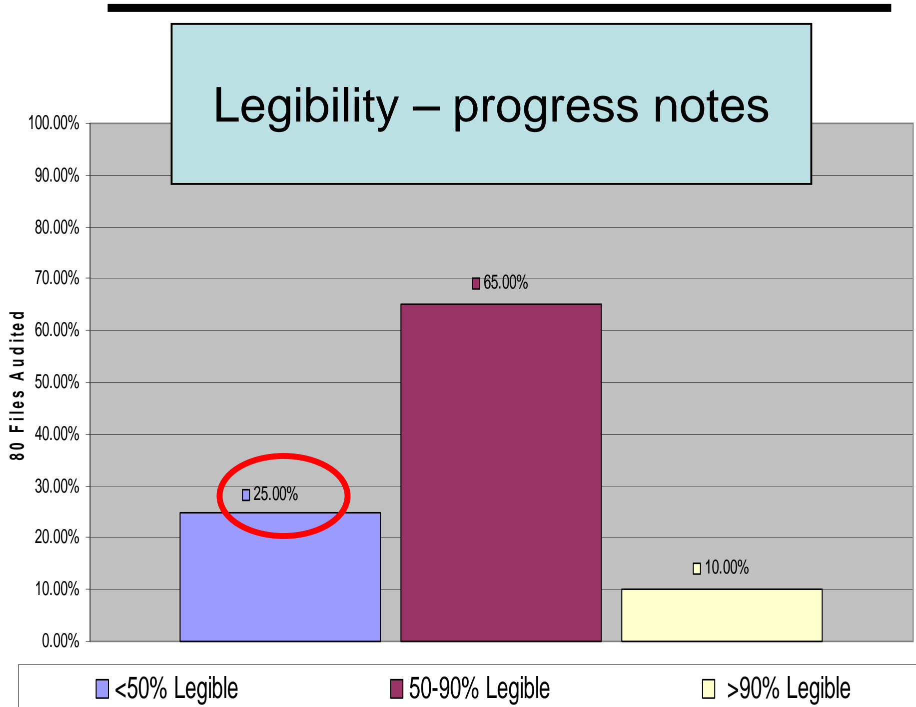
39 Files
9 Files
< 80% Legible
80-99% Legible
100% Legible


Legibility – progress notes
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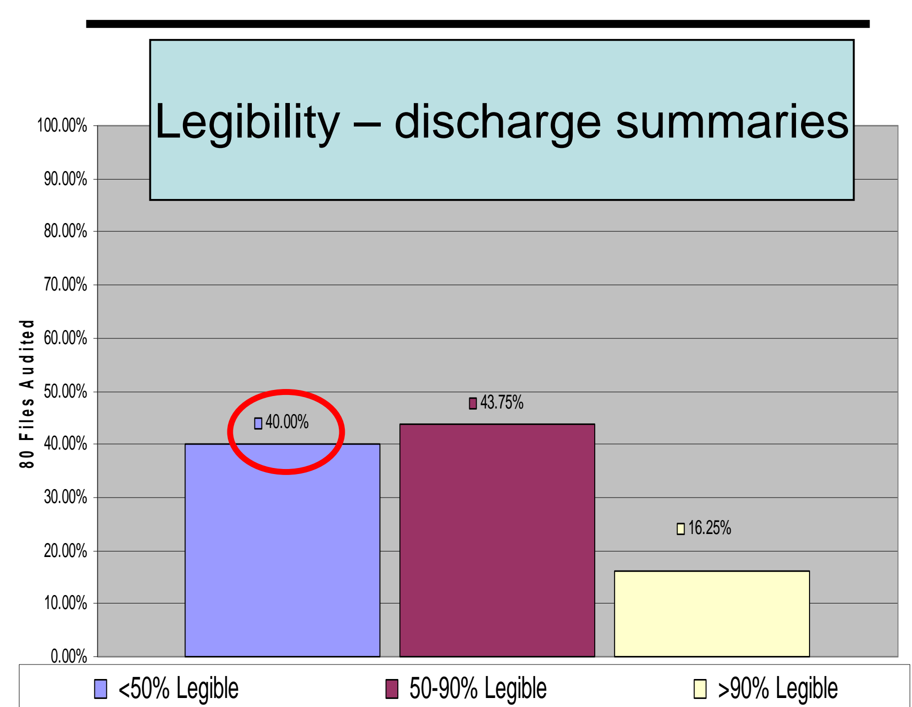
>90% Legible


Legibility – discharge summaries
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80 Files Audited
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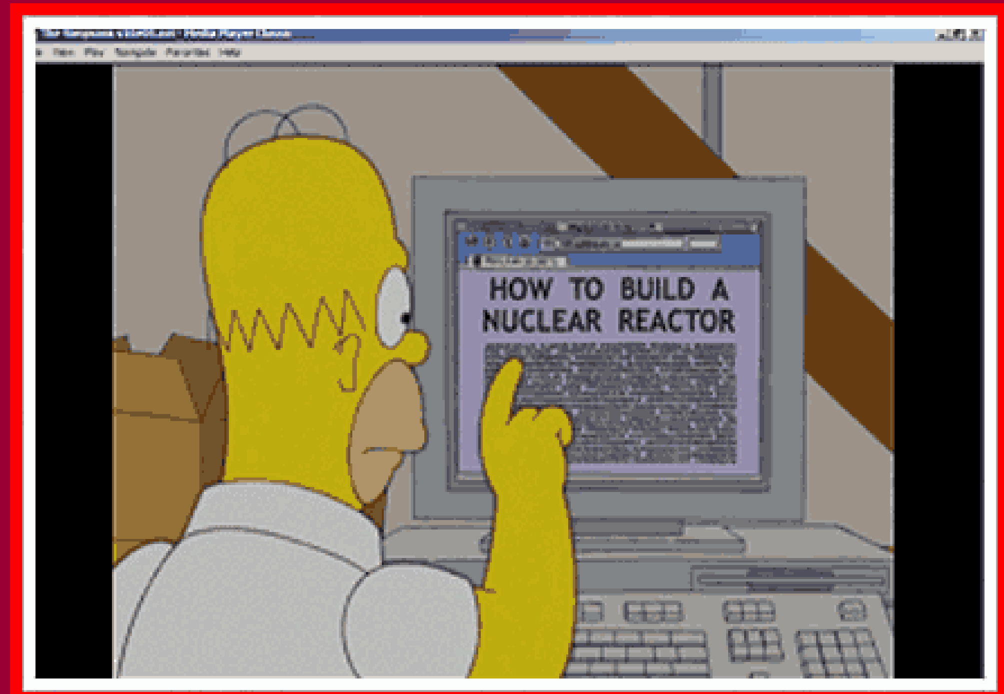
43.75%
16.25%
<50% Legible
50-90% Legible
>90% Legible

# “Nursing” handovers - Footscray

- 11 wards, plus ED and ICU
- 8 / 11 use their own in-house MS Word or Excel hand-over sheets (***all different***)
- 3 / 11 use **“Homer” sheet**



M10 | STROKE.p/w bil leg Weakness+dizzyness +FD,PHX;AAA,PE,IHD,ASTHAMA,PUD,TURPx2,prostate Ca,Cholecystectomy Vasc dementia

| Patient Details | | Diagnosis (Phx /Allergy) | Social | Diet | MATT | Daily Care (Obs, Mobility, Continence etc..) | Plan/ Discharge Destinatioin | DAILY NOTES |
|---|---|---|---|---|---|---|---|---|
| F 80 | NEURO 08/11/06 | **TIA**-p/w dysphasia **PHX:**HT,IHD,NONSTEMI,AF,M.TIA's **NKA** | alone | FVDFF | MM | GCS-15,NP,Amb s/c,all symptoms resolved,QID OBS .watch for ss+dysphagia Warfarin INR 1.8 (Aim INR 2-3) | MRIB , CTB-L) Frontal Hypodensity OT H Visit personal alarm | |
| F e: 94 | NEURO 06/11/06 | **ICH**-p/w confusion,L)facial weakness+L)arm neglect **phx;** gallstones,pancreatitis,cholecystectomy,arthritis,HT **ALLERGY**:Penicillin **NFR** | daughter | pureed /thin | MM | Gcs-14-15, mod weak L)UL, Incontinent/cont, Hoist transfer to SOOB, GTN patch above 180/100, reg Panadol / Panadiene Forte, reg aperients pl. | OT/PT ongoing r/v RV next week ? Home l/c family or HLC for ACCS monitor temp | |
| 88 M | NEURO 10/11/06 | **STROKE.p/w bil leg Weakness+dizzyness +FD,PHX;** AAA,PE,IHD,ASTHAMA,PUD,TURPx2,prostate Ca,Cholecystectomy Vasc dementia | WIFE with services | FVD. | MM | GCS-14,N POWER ALL LIMBS,BUT UNSTEDY Amb I/C FRAMEx 1 assist. Contient. **on clinical pathway** | AH+Speech r/v. needs CXR r/v, Doppler Mon | |
| M 75 | Neuro 03/11/06 | **Progressive Weakness UL S- L)Arm worse 2 Vasculitis PHX:**Diab,Chol, HT. Recent removal of melanoma.R) shoulder,IHD, | Alone | Diab | MM | Assist ADL'S -sling insitu for shower,trans X2, 2 pillows for arm while SOOB/RIB, **Keep L arm above heart STRICT BD** peak flow on condom drainge , QID BSL oral hypos,. SSI. | L) GlutealMuscle + L)Radial Nerve Bx done(9/11). Dressing daily, stitch out (arm due in 7/7) (Leg on 10/7) Await Endo R/V | |
| F e: 86 | Neuro 08/11/06 | **L) Cerebellar bleed.** Presented with sudden onset of uncoordination in L) lower limb wile walking. PHX=Peptic ulcer disease, smoker, dementia. Allergic to Ventolin **NFR** | Alone with services with services | FVDFF | MM | **Clinical pathways** Pt RIB. Incontinent,FNC, 4/24 neuro obs. GCS14. Drowsy ++. O2 sats 93%. For oral Abs | For allied health r/v . MMSE ACCS ax pending | |
| F e: 84 | Neuro 04/11/06 | **Stroke.** R leg spasm L arm weakness fi **PH** TIA Ca bladder. Allergy: penicillin & contrast. **NFR** | son/daugh | nil orally | MM | **clinical pathways GCS dec 14-10( pm 11/11)** ,drowsy,IDC -ret (9/11). low urine output. Encourage fluids,IVT; NG Meds (INR was 6.3)W/H WARFARIN,had- stat vit K & CTB done nil bleed INR now 1.4 | MSU sent;pending hip X-ray and EEG result;awaits Ortho R/v.re:Lradius #;for MRI brain;bone scan Monday speech & dietitian rv | |
| f e: 76 | ORTH 29/10/06 | **#R)NOF R hemiarthroplasty 29/10** spinal .unwitnessed fall at NH.**phx;** alzheimers,dementia | Hostel | soft | Bi wave | **Confused,** Standing hoist transfer.R) Hip pressure area/blister(Tegaderm), incontinent. **Encourage oral intake**; IVT FBC and Food chart | Ongoing Physio rv . Accs r/v ? HLC | |
| F 71 | Neuro 39030 | **L) B.G.haemorrhage.P/W N/vomiting+R) weakness.phx;PUD,#NOF,Stroke, HT,Gallstones NFR** | NH | NGT FED | ROHO | clinical pathways N/Obs GCS 13, incoherent, R) sided wekaness, .Cont/ Incontinent,FNC. TEDS. Trimethoprim UTI . | AH R/V. RPT MSU MON. GTN If BP > 180 /100. | |
| F e: 89 | neuro 08/11/06 NFR | **large R MCA INFARCT.** P/W L) FD+ l)sided weakness+dysarthria,phx;OP,COAD,VIT D Defficiency,Cataracts **NFR** | husband | NGT | Trinova | gcs-10,Aphasic,severe weak L) side,drowsy,ngt feeds @W/E Regime.incontinent,FNC,L ankle pain -await R/V R leg spams Chesty frothy creamy sputum | ongoing A/H R/v, ?ACCS | |

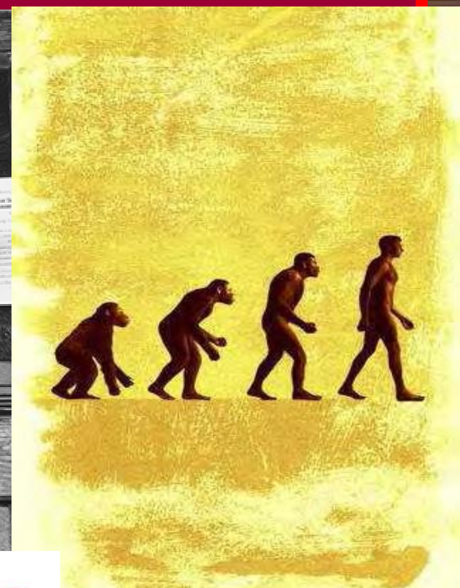
Chart1 / Chart2 / Sheet4 / Sheet1 / Sheet2 / Sheet3 /

Open a workbook
Graph for
Readmissio
Readmissio
Roster Info
More work
New
Blank Work
New from exist
Choose wo
New from temp
General Te
Templates
Templates
Add Netwo
Microsoft E
Show at st

TELLER.

nab
Commonwealth Bank
st.george

ANZ



HSBC
24 Hour Banking
HSBC

# “Standardised Handover” ?

Handovers need a certain minimum content, but then must be ***tailored*** to match the unit or department:

- Differing clinical problems and needs
- Differing numbers of staff, rostering methods, etc
- Differing staff roles

# What is needed ?

**1.** User-friendly and interfaceable Electronic handover system

**+**

**2.** Face-to-face handover

**+**

**3.** Dedicated location

**+**

**4.** Dedicated time

**+**

**5.** Continuous promotion by dedicated Clinical and Executive Leadership

**+**

**6.** Performance Indicator measurements

# Minimum content for handover ?

***Medical:***

**Which patients ?**

- New admissions
- Unstable patients
- Patients awaiting critical results
- Other patients

**Patient details required** (point format):

- Patient clinical problems … list details
- Anticipated problems
- Social situation
- NFR status
- Recent pathology + radiology results
- Current medications
- Allergies
- Admin details – which ward, unit, consultant,registrar, date of admission

# Minimum content for handover ?

## ***Nursing***

***Which patients?*** → **All of them**

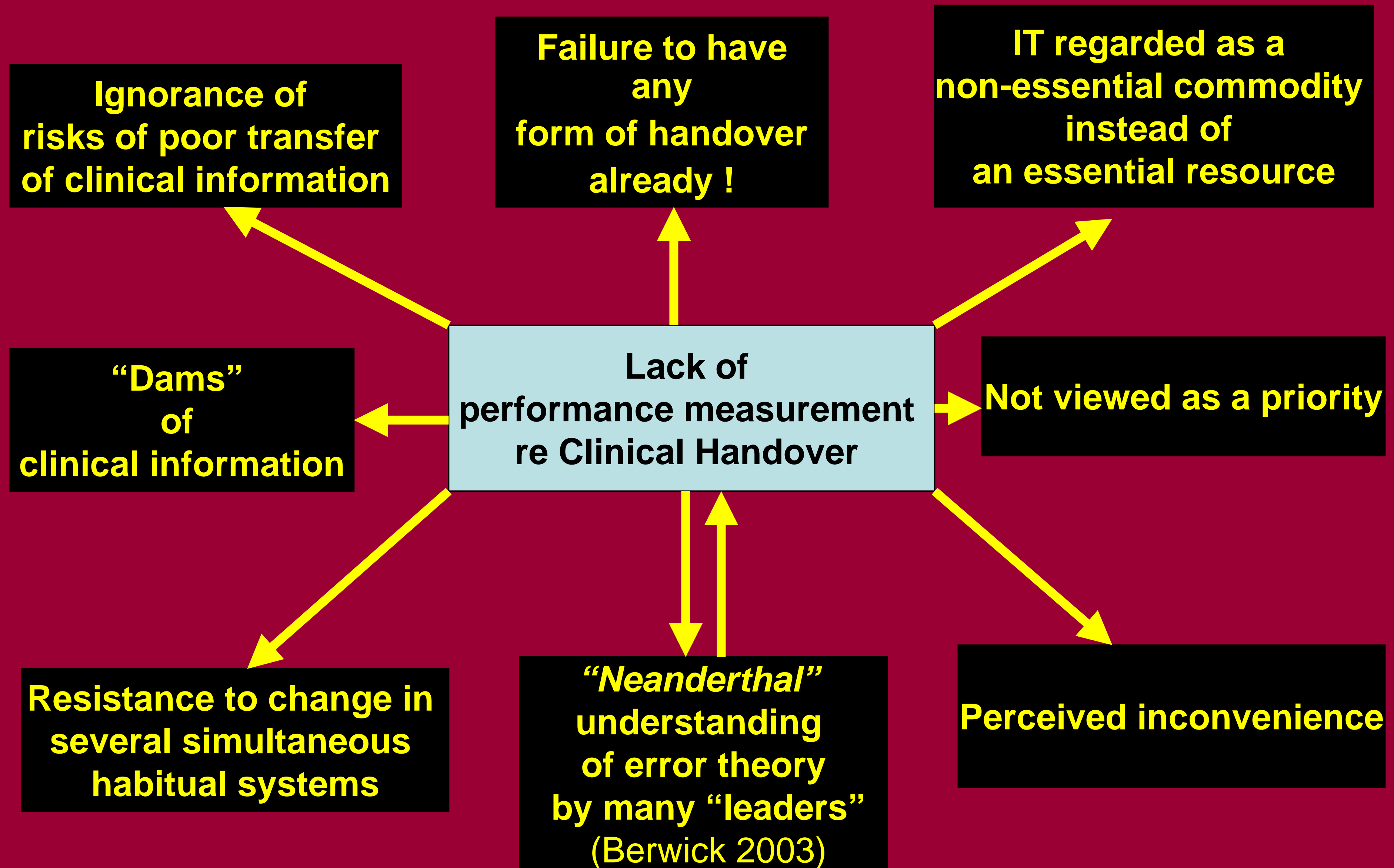
***Patient SUMMARY details required :***

- **Admission diagnosis**
- **Other active clinical diagnoses**
- **Significant Past History / diagnoses**
- **Social situation**
- **NFR status**
- **Admin details – (ward, unit, consultant, registrar, date of admission)**
- **IV antibiotics, other IV meds**

# Minimum content for handover ?

## ***Nursing (cont.)***

- **Diet**
- **Frequency of, and type of observations required**
- **Pressure care required**
- **Mobility status**
- **Continence status**
- **Plan of management (incl consults, investigations)**
- **Discharge plan, including estimated date of discharge**


Barriers to Optimal Clinical Handover
1. Organisational / Professional Culture
Ignorance of risks of poor transfer of clinical information
Failure to have any form of handover already !
IT regarded as a non-essential commodity instead of an essential resource
"Dams" of clinical information
Lack of performance measurement re Clinical Handover
Not viewed as a priority
Resistance to change in several simultaneous habitual systems
"Neanderthal" understanding of error theory by many "leaders" (Berwick 2003)
Perceived inconvenience

# Barriers to Optimal Clinical Handover
## *2. Basic logistics*

**Absence of appropriate physical space**

**? No overlapping shifts**

**Appropriate financing and structure**

(Improving safety ***usually*** costs money in the ***short*** term !)

**Time constraints**

**One doctor may cover several units with different "start" and "finish" times**

**Omitting important details in Handover**

**Illegibility of inpatient notes or handover sheets**

**One doctor may cover 2 or more sites, or Units**

# Barriers to Optimal Clinical Handover

## *3. Non-provision of appropriate Information Technology*

**Absence of a usable electronic database which can be shared between teams**

**Inadequate patient registration software**

***Absence of an appropriate Electronic Medical Record***

**No widely accepted standards for software**

**Failure of different software to interface**

**Lack of effective electronic tools to audit Clinical Handover**

**No incorporation of Clinical Handover Software into typical health IT systems**

# Barriers to Optimal Clinical Handover
## *4. Individual / Personality / Behavioural factors*

Variability in attention to detail between clinicians

Differing expectations between different clinicians

Language difficulties

Resistance to Information technology by some

Other communication barriers