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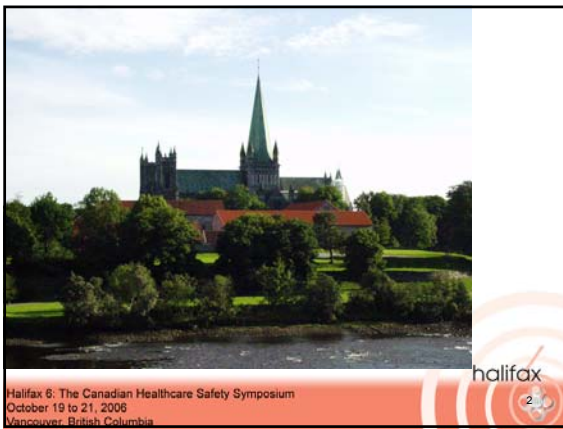
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Problems in Safe Design  
is there a link between hospital  
design, patient safety and  
economy?

Sven Erik Gisvold  
Professor, Department of Anaesthesia  
St. Olav University Hospital  
Trondheim, Norway

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## What type of hospital?

- 900 bed university hospital  
highly specialized  
development and research
- Very busy day/night “local hospital”  
trauma centre  
all regular emergencies
- 20,000 anaesthetics per year

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## Day/night emergency work

- One building – one floor
  - Emergency admission
  - Emergency radiology
  - Emergency surgery
  - Postop./ICU

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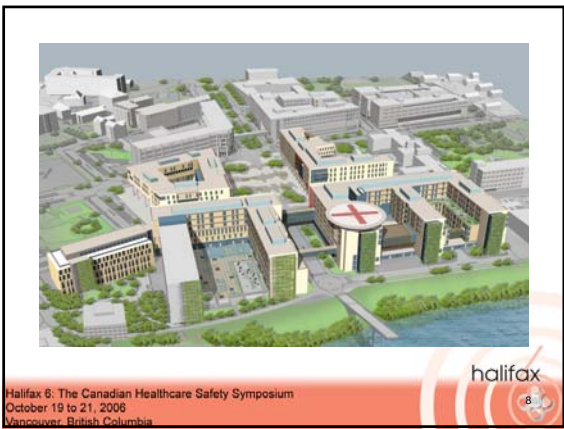
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**The patient – focused hospital**

- Everything the patient needs will be there
  - in that building
  - Emergency admissions
  - Radiology
  - Anaesthesia/surgery
  - Postoperative care – ICU
- "And it will be cheaper to operate than a traditional compact hospital"

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## Major protests from anaesthesia/ICU and radiology

How to run this hospital at night?

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## Why is this a good idea?

- Small groups
  - operating rooms
  - Personnel
  - Equipment
- Promotes communication/cooperation
  - Work quality
  - Development and research
- Control of all “tools” for production
- “Small is beautiful”

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## Why is it not a good idea?

- Very expensive and impractical
  - On call staffing doubled
- Anaesthesia, op. room staff, radiology, postop./ICU, Emergency admission
  - Decentralised support around the clock
  - Financial and practical problems
- Very vulnerable – worsened patient safety?

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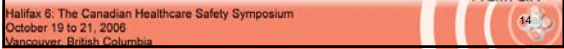
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Is it “safe” for the health care workers?



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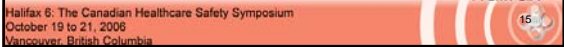
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Being a young and inexperienced trainee anaesthetist:  
a phenomenological study  
on tough working conditions

- A difficult role
- A feeling of insecurity
- Lack of support
- Feeling lonely and helpless

J. Larsson et.al. Acta Anaesthesiol Scand  
2006; 50: 653



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## “The hospital at night”

- Facing multiple emergencies in separate buildings

vs.

- Being together on one floor
- “the lonely resident”
- How to support and supervise?
- What if something happens?

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## Small is beautiful also at night

- Safer and cheaper
- Cooperation
- Communication

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## Team communication in the operating room

- Reduces morbidity and mortality
- Improves team function
- Saves lives, time and money

Davies JM. Acta Anaesthesiol Scand  
2005; 49: 890

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## The emergency hospital is like a hockey team

Individual star performers  
vs.  
Team play and team spirit

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## The future of anaesthesia and intensive care and radiology

- Cut in pieces?
- Production tools?

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Thank you for your attention



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