Role development of Radiographers in the Nordic Countries

-Cancer Pathway Guidelines
-Gradual Transition

Håkon Hjemly
Manager of Policy – The Norwegian Society of Radiographers.
Overview and status

• All Nordic countries have same educational level, 3-3.5 year bachelor.
• Approximately 10,000 radiographers are members in the Nordic national societies in total.
  • Norway, Denmark and Sweden have “similar” language.
• Until around year 2000 there were a shortage of radiographers in the whole Nordic region.
• Starting to see shortage of radiographers and RTs again.
  • Constant shortage of radiologists*.

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Overview and status

- Large increase in inhabitants and in number of diagnostic and therapeutic exams performed (not in Iceland..)
  - Economical challenges
- Increasingly demand for streamlining all sectors
- Role Development and sharing of tasks between professions is being addressed by political leadership, as a necessary tool to meet the future demands in service delivery
- Education in image interpretation and sonography, Master level
Cancer Pathway Guidelines

• The overall objective of a cancer pathway is to assure a ‘fast-track’ diagnosis and well-coordinated course of treatment, with minimal delay for patients suspected of having a malignant disease.

• Denmark was the first Nordic country to implement a lung cancer pathway in 2009. Norway and Sweden followed in 2015 and 2016, respectively. (Finland 2020)

• Streamline by standardising referring, diagnosing and treatment of most commonly cancers (diseases).

• Should include >70% of all patients within each diagnostic category
Lung cancer guidelines in Sweden, Denmark, Norway and Finland: a comparison

Niels Lyhne Christensen, Antti Jukunen, Sebastian Heinonen, Susanne Oksbjerg Dalton & Torben Rils Rasmussen

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Table 2. Standard time frames in cancer packages for Denmark, Sweden and Norway.

<table>
<thead>
<tr>
<th>Course element</th>
<th>Denmark</th>
<th>Sweden</th>
<th>Norway</th>
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</thead>
<tbody>
<tr>
<td>From referral to onset of diagnostic work-up</td>
<td>6 calendar days</td>
<td>5 calendar days</td>
<td>7 calendar days</td>
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<td>Onset until completion of diagnostic work-up</td>
<td>24 calendar days</td>
<td>21 calendar days</td>
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<tr>
<td>Completion of diagnostic work-up until onset of treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sur</td>
<td>14 calendar days</td>
<td>14 calendar days</td>
<td>14 calendar days</td>
</tr>
<tr>
<td>RT</td>
<td>15 calendar days</td>
<td>14 calendar days</td>
<td>14 calendar days</td>
</tr>
<tr>
<td>Che</td>
<td>11 calendar days</td>
<td>10 calendar days</td>
<td>7 calendar days</td>
</tr>
</tbody>
</table>

Sur: surgery; RT: radiotherapy; Che: chemotherapy.
Standardised pathways results..

- Appr. 30 cancer diagnosis
- Also, Cardio-Vasc and Psyciatric diagnosis
- Results: mostly good, on paper..
- Small drop in official waiting times
- Less people are actually being treated..
- Capacity shortage was newer solved
- Very short time frame for implementation
- No money followed already overloaded departments..
- Internal loops created
- Noone really knows how this works for all patients..
«Sharing tasks with radiologists– what are the views of the radiographers?»

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Buskerud University College (HiBu). Co authors: Prof. E. Stranden, Inst. Leader A.M. Myklebust; Drammen/NO

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Results:

• The radiographers in the study believed that by relieving some diagnostic responsibilities from the radiologists, such as interpretation and reporting of skeletal exams and general ultrasound this can provide service improvements.

• The radiographers expressed that the most limiting factor for role development into advanced practice is strong resistance amongst the radiologists.

• However, in spite of the negative attitude amongst radiologists towards radiographers taking on greater diagnostic responsibilities, and the lack of formal support from the department, the radiographers do take decisions regarding justification and clinical follow up when they feel it is in the best interest of their patients.
At daytime....
A birthday present..
This report has been commissioned by The Norwegian Society of Radiographers. The aim of the report is to examine whether task sharing between radiographers and radiologists is a practical method by which to solve bottlenecks within diagnostic imaging. The report is based on a literary study of national and international literature in the field, and on interviews with practitioners involved in Norwegian task sharing projects, and with patient and employees’ organisations.
International trends

The majority of Western countries experience a shortage of radiologists, and the causes are apparently the same:
- Introduction of new modalities, increase in demand for diagnostic imaging services, more comprehensive and complex image material, more time-consuming image analysis..

The basis is laid for bottlenecks in most countries.
Solving bottlenecks?

The international trend, to varying degrees, have attempted to remedy this shortness of radiologists by adopting one or more of the following strategies:

- transfer of responsibilities from radiologists to radiographers
- restrict the unnecessary use of diagnostic image services
- educate and train more radiologists.
Educate more radiologists?

Most countries attempt training more radiologists or outsource radiology service.

None of the industrialised countries has been successful in meeting the demand for radiologists through education.

The volume of outsourcing is not clear, nor to what extent it has been successful.
Restriction in use of diagnostic imaging?

- Restriction of unnecessary use of diagnostic imaging;
  - Obviously unnecessary (duplicates, not clinically relevant)
  - Rely more on clinical evaluation and alternative diagnosis procedures.

- NIFU did not find any studies which suggest these measures have been effective.
NIFU recommendations:

• Sharing of diagnostic tasks between proper educated and trained radiologists and radiographers has the biggest potential for removing «bottlenecks».
• Sharing of tasks need to be well prepared.
• Waiting time reduced from 14 to 4 weeks for general abdominal US
• Sonographer in charge of whole examination process
• Training of residents/unexperienced radiologists
• Working in close collaboration with experienced radiologist
## Advanced Practise Radiographers in the Nordic Countries

<table>
<thead>
<tr>
<th></th>
<th>Norway</th>
<th>Denmark</th>
<th>Sweden</th>
<th>Finland</th>
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<tr>
<td>Reporting R</td>
<td>20</td>
<td>90</td>
<td>3*</td>
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<td>15</td>
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<td>US, RR, CTC</td>
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Radiographers take the vital images