



VOXEL
Medyczne Centra Diagnostyczne



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Teleradiology – regional experience and perspectives in Poland



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Medicine Society

- **Telemedicine** has been defined in general terms to be 'medicine practised at a distance'

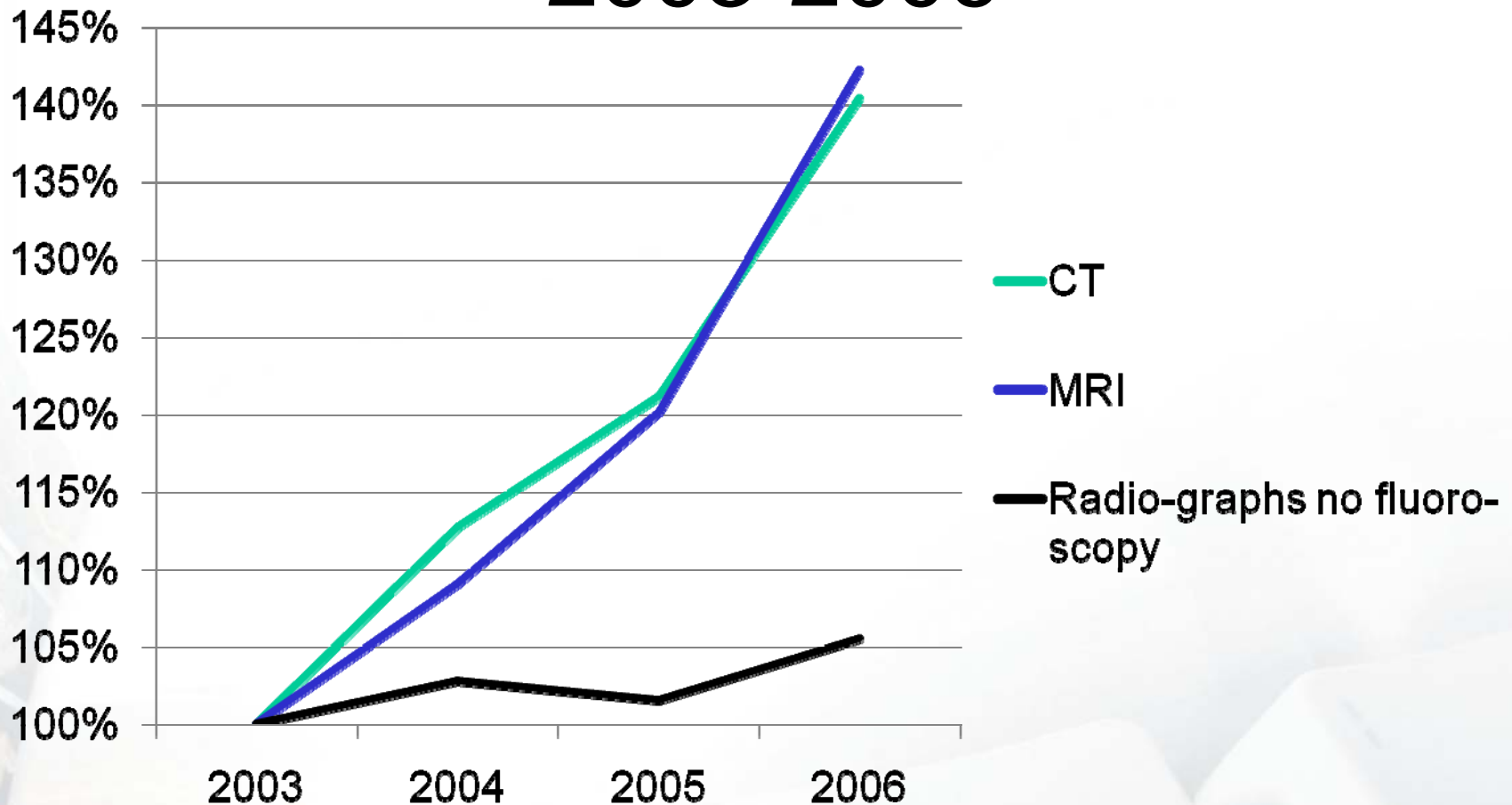
Journal of Telemedicine and Telecare;
http://www.rsmppress.co.uk/jtt_gfa.htm



- **Teleradiology** is the electronic transmission of radiographic images from one geographical location to another for the purposes of interpretation and consultation

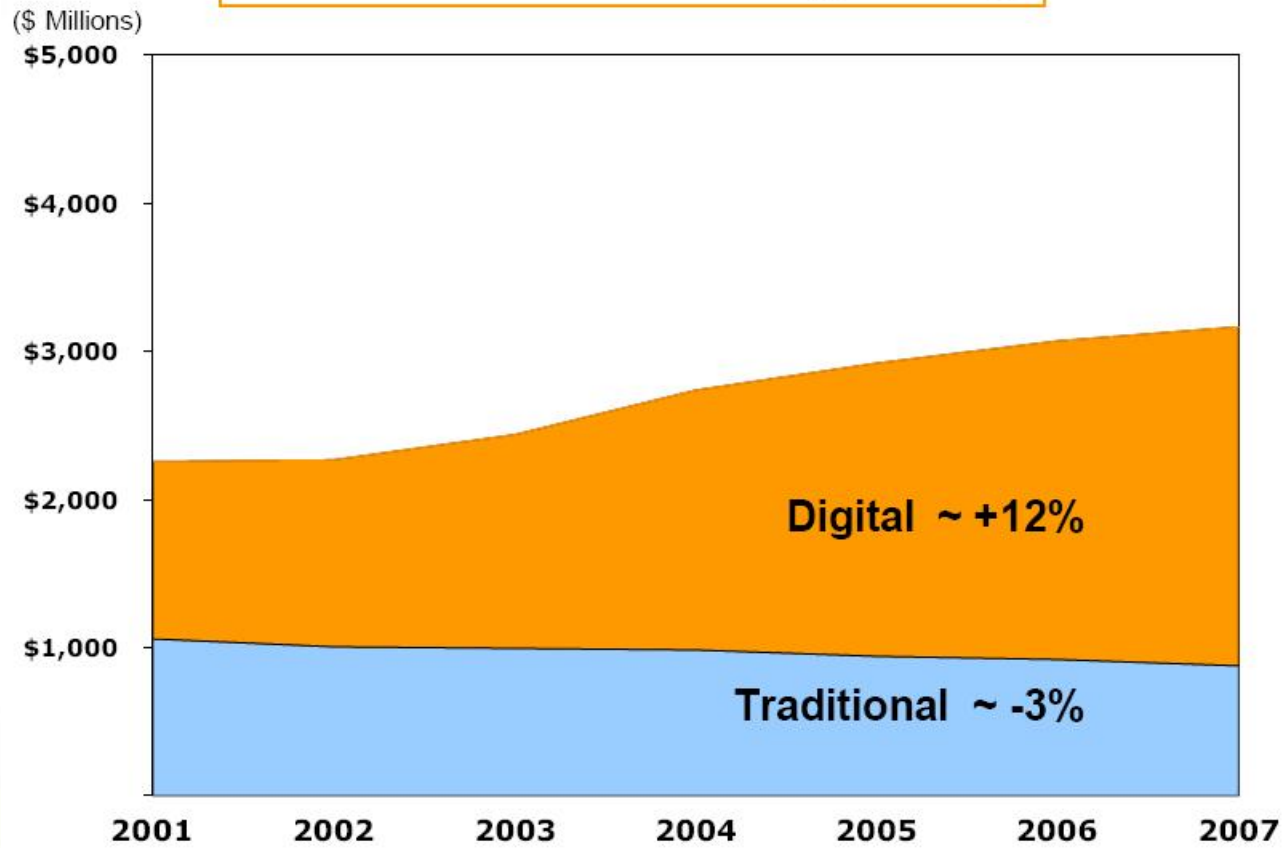
<http://www.ear-online.org/hauptframe.php>

Increase in imaging procedures in 2003-2006



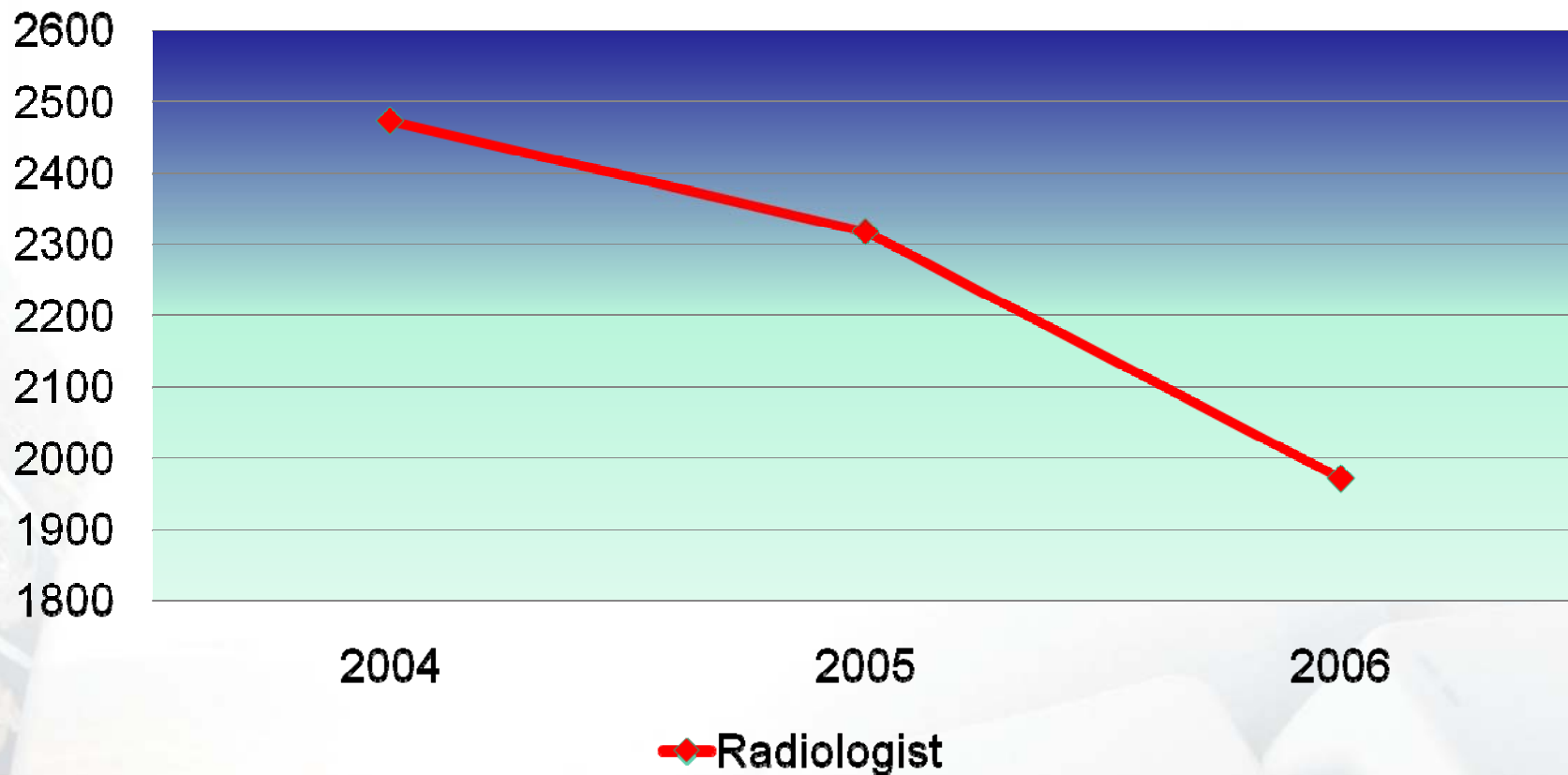
Market value in USA

2003 – 2007 CAGR: +6% to +8%

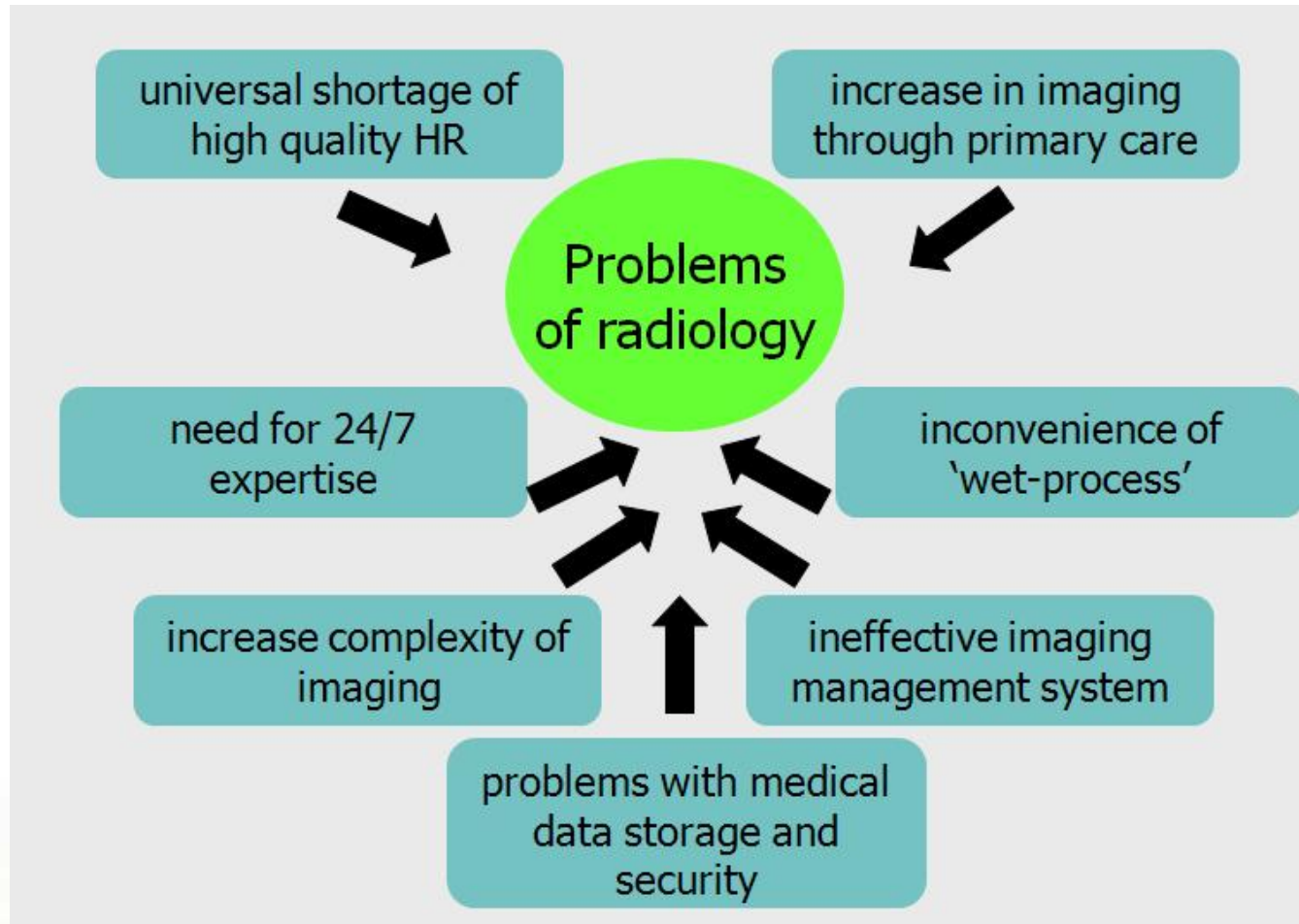


Shortage of qualified staff

Radiologists in Poland



Problem definition





**"Your x-ray showed a broken rib,
but we fixed it with Photoshop."**

The joined power

experience

resources

equipment

know-how

solutions

flexibility

expertize

security

success

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Alteris driven teleradiology networks



Problem classes

- Human
 - Training
 - Multimedia training
 - Help-desk
- Data preparation
 - Imposition of proper procedure of the source side
- Transmission breakdowns
 - Alternative transmission paths
- Incomplete transmission
 - Proper training
- Other issues
 - Enabling interaction between radiologist and radiographer
 - QA

Moderator role

Life is simple only in handbook!

Sources of uncertainty

- Unequal adhereness to standard procedures
 - Force major:
 - Cumulations of cases
 - Transient radiologist unavailability
 - Technical issues e.g. temporary transmission slow-down
 - Human factors
-

Practical solutions:

Human moderator that knows procedures, resources and is technically capable to take action

Conclusion

- Teleradiology has reached the practical application level
- Major issues can be resolved by properly trained moderator