Genomic medicine in practice

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Learning outcomes

By the end of this session, we're aiming for you to be able to:

- Describe the role of genomic medicine in pancreatic cancer
- Understand current referral pathways
- Recognise who should be offered genomic testing
- Discuss genomic medicine confidently with patients
- Identify practical barriers and solutions for implementation

Let’s begin with a question…

If two patients have the same type of pancreatic cancer, do you think they should always receive the same treatment?

- Yes
- No
- Not sure

Why does genomic medicine matter in pancreatic cancer?

What do we know about pancreatic cancer?

- Most patients are diagnosed late
- Limited access to treatment
- Poor survival rates

Where does genomic medicine come in?

- Increases availability of targeted therapies
- National recommendations supporting genomic testing

With this in mind…

Why do you think genomic testing is still underused? *Share your thoughts in the chat*

Who should be offered germline testing? *Share your thoughts in the chat*

Current consensus for pancreatic cancer

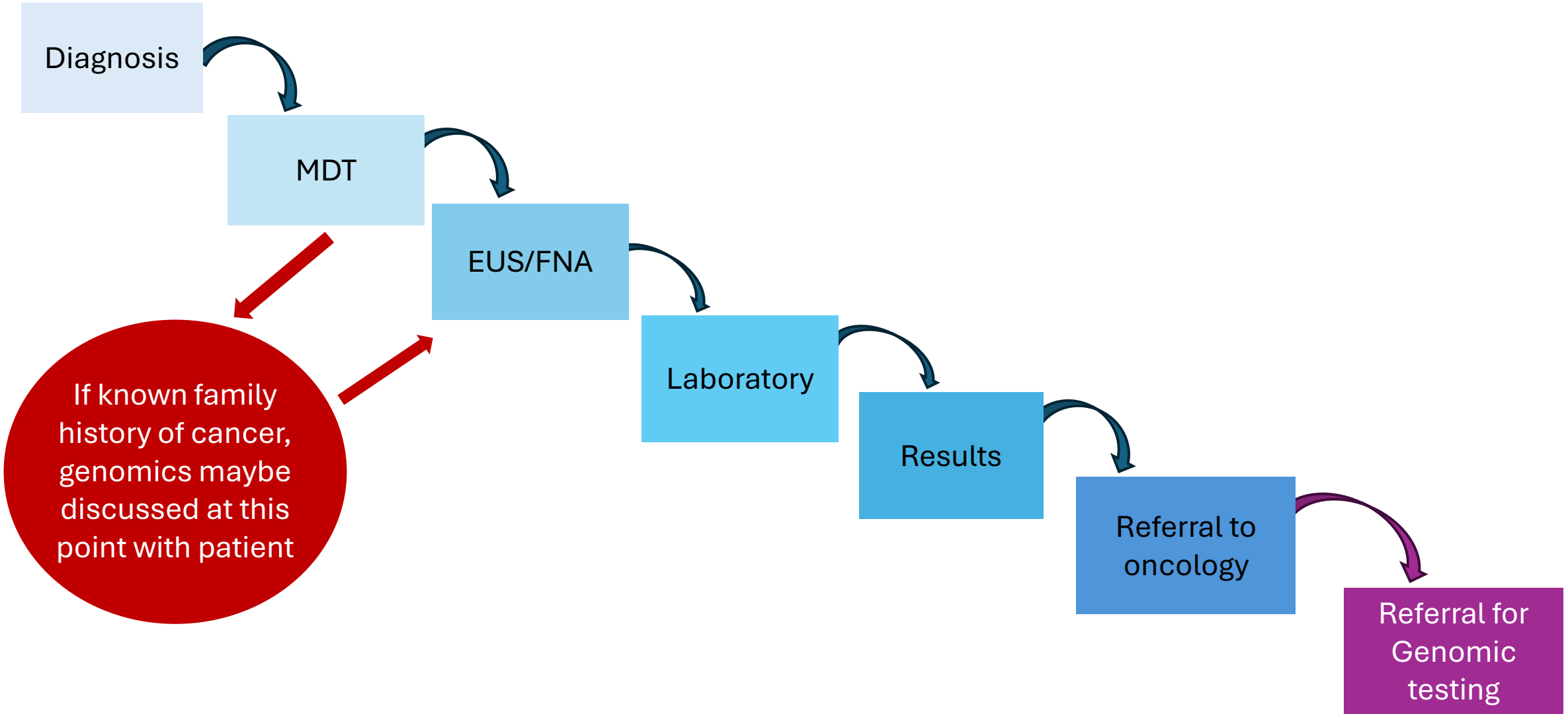
NCCN, ESMO, ASCO and NHS guidelines

Offer germline multigene testing to every patient with pancreatic adenocarcinoma.

Perform comprehensive tumour molecular profiling in patients with advanced or metastatic disease.

Use genomic findings to guide targeted therapy, immunotherapy, clinical trial enrolment, and familial cancer risk assessment.

Previous GM Pancreatic Genomic pathway



What were the **barriers**?

- Lack of awareness
- Time constraints
- Funding
- Delayed results
- Workforce shortages
- Limited access to genetics services
- Confidence discussing genomics
- Patient understanding

Benefits and Challenges

Benefits

- Personalised treatment
- Clinical trial eligibility
- Family screening
- Better treatment selection
- Improved patient understanding

Challenges

- Limited access
- Waiting times
- Incidental findings
- Cost
- Interpretation of results

How did we reshape the pathway to get quicker testing?

We needed to look at quicker diagnostics, so we looked at the following:

- Who requests testing?
- Which laboratory performs sequencing?
- Turnaround time
- MDT involvement
- Electronic requesting system
- Genetics clinic referral pathway

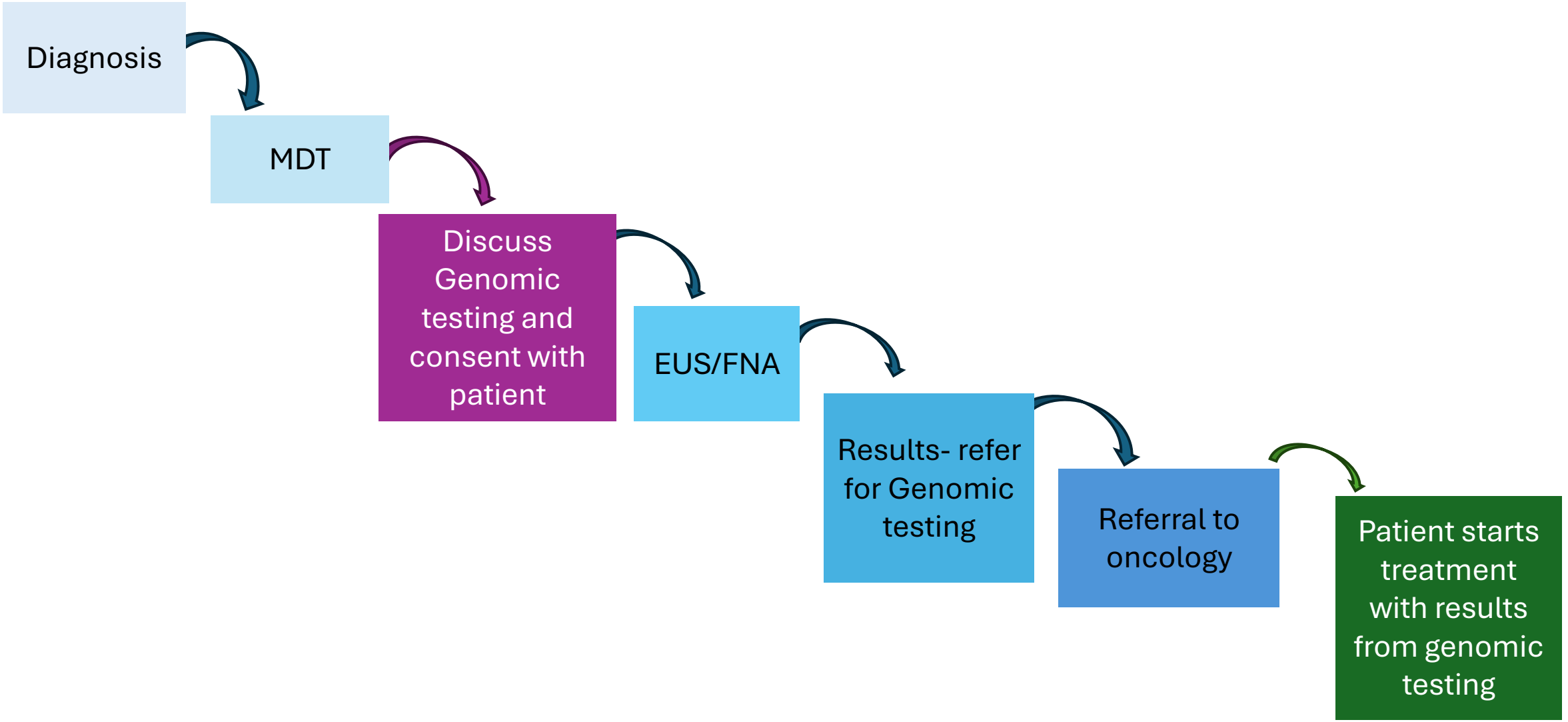
The Answer: Hepatobiliary clinical nurse specialist aka, GENOMICS CHAMPION

Hepatobiliary CNS role

- HPB CNS identified as a **key enabler** of timely genomic testing and treatment planning.
- **Early CNS involvement improved pathway** coordination and patient navigation.
- HPB CNS **review at diagnosis facilitated earlier identification of patients requiring genomic testing.**
- Embedding genomic test requests within the HPB CNS review at EUS referral ensured **timely initiation of testing**.
- **Simple, cost-neutral pathway change** with no additional resource requirements.
- Earlier testing reduced delays, supporting **faster treatment decision-making** and improved pathway efficiency.

🔑 **Key outcome: Earlier HPB CNS involvement led to earlier genomic testing and a more streamlined patient pathway.**

Current GM Pancreatic Genomic pathway



How do we consent and give information to our patients?

Practical tips for introducing genomic medicine

- ✓ Learn your referral criteria
- ✓ Know your genetics team
- ✓ Use MDT meetings
- ✓ Have patient information leaflets available
- ✓ Document consent carefully
- ✓ Follow up outstanding results
- ✓ Build relationships with laboratory colleagues

Frequently asked patient questions

- Why do I need this test?
- Will it change my treatment?
- Is it inherited?
- Will my insurance be affected?
- How long will results take?
- What happens if a mutation is found?

Local implementation: Lessons learned

Successes

- Increased testing rates
- Earlier referrals
- Better MDT discussions
- Better communication and networking throughout the pathway with colleagues

Challenges

- Staffing
- Sample quality
- Delayed reporting

Future priorities

- Education
- Electronic referral systems
- Standardised pathways

Key Messages

- Genomic medicine is becoming standard care.
- Testing should be considered early.
- Every MDT member has a role.
- Patient communication is essential.
- Knowing your local pathway is just as important as understanding the science.

Time to reflect…

What is one change you could make in your own practice after today's session? *Share your thoughts in the chat*

Appendix

- NICE Guidelines- Overview | Pancreatic cancer in adults: diagnosis and management | Guidance | NICE
- NCCN Guidelines- Genetic/Familial High-Risk Assessment: Breast, Ovarian, Pancreatic, and Prostate - Guidelines Detail
- ESMO European Society For Medical Oncology | ESMO
- ASCO- American Society of Clinical Oncology