# Diabetic retinopathy screening: Governance and quality

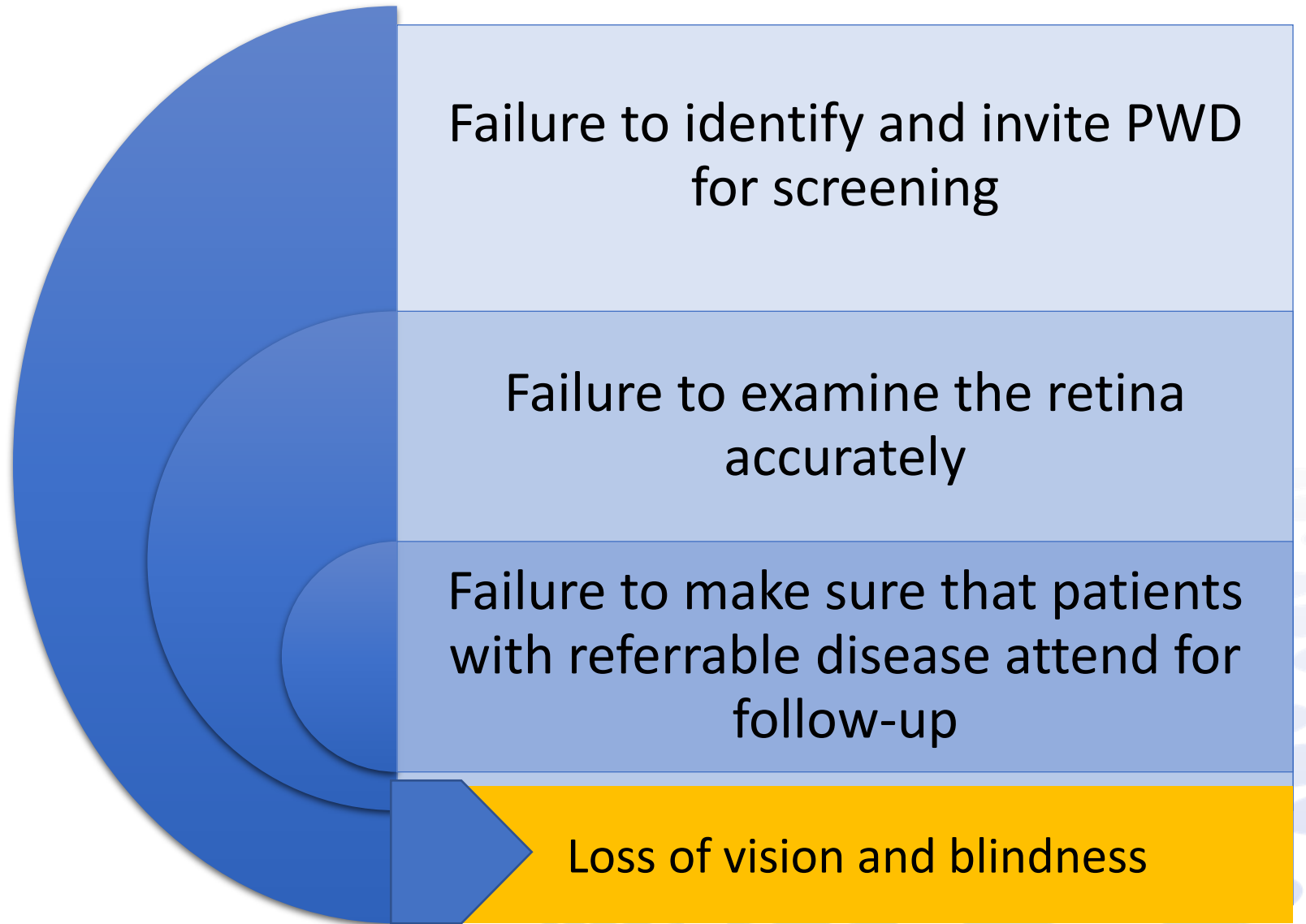*Dr Sue Cohen, WHO consultant*

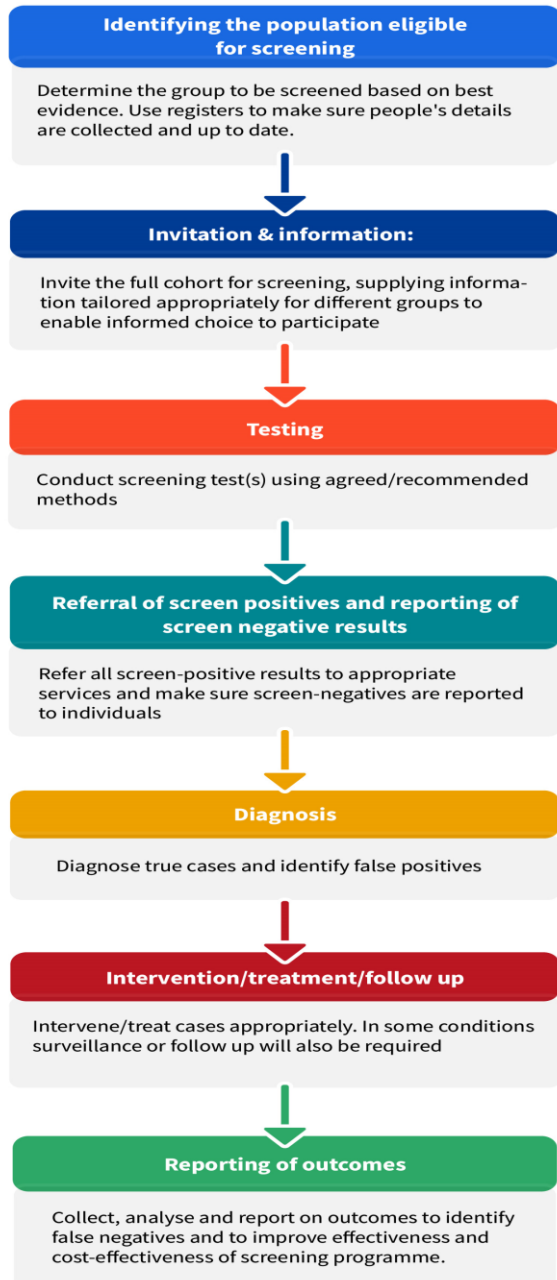# Why do we need to focus on governance and quality?

64 million people in European Region have diabetes

950,000 have vision impairment or blindness as a result of diabetic retinopathy

Tackling this huge problem requires a strategic approach and a focus on governance and quality

What does poor quality mean?

Failure to identify and invite PWD for screening

Failure to examine the retina accurately

Failure to make sure that patients with referrable disease attend for follow-up

Loss of vision and blindness

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Identifying the population eligible for screening
Determine the group to be screened based on best evidence. Use registers to make sure people's details are collected and up to date.

Invitation & information:
Invite the full cohort for screening, supplying information tailored appropriately for different groups to enable informed choice to participate

Testing
Conduct screening test(s) using agreed/recommended methods

Referral of screen positives and reporting of screen negative results
Refer all screen-positive results to appropriate services and make sure screen-negatives are reported to individuals

Diagnosis
Diagnose true cases and identify false positives

Intervention/treatment/follow up
Intervene/treat cases appropriately. In some conditions surveillance or follow up will also be required

Reporting of outcomes
Collect, analyse and report on outcomes to identify false negatives and to improve effectiveness and cost-effectiveness of screening programme.

We need quality in every step of the screening pathway – otherwise people will lose their sight

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# How do we create a high quality service?

Leadership

Quality assurance system

Training
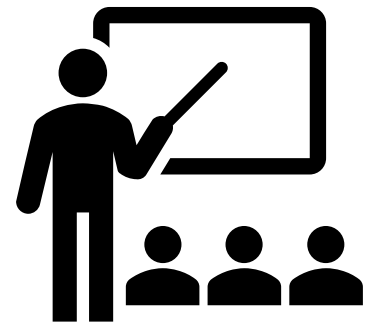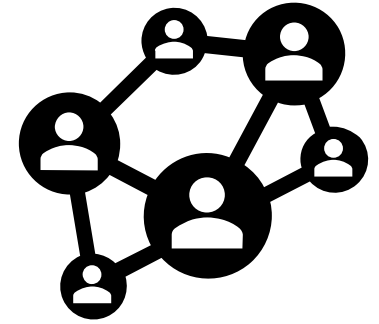
# Leadership

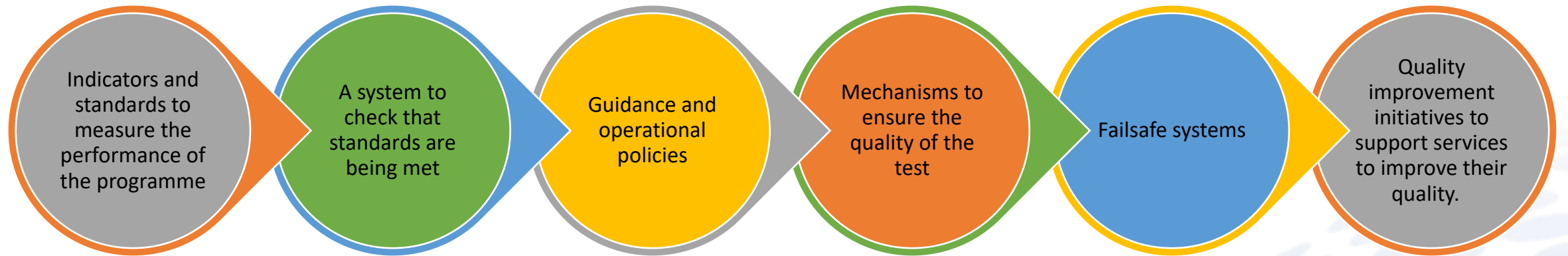| Where? | Who? | What? |
|---|---|---|
| • National & regional<br>• Local<br>• Hospitals, primary care | • Ophthalmologists<br>• Diabetologists<br>• Primary care<br>• Policy-makers<br>• Public health | • Be an advocate<br>• Build links with other specialists<br>• Know what's happening – data<br>• Encourage learning and a high quality culture<br>• Promote QA<br>• SOLVE PROBLEMS |

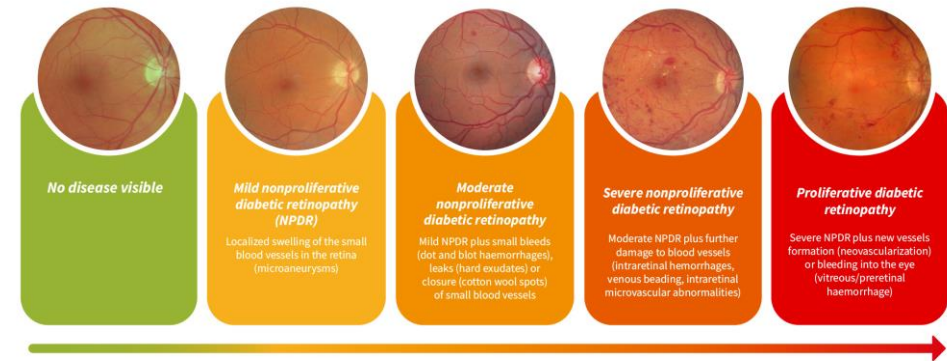# Quality assurance system

Indicators and standards to measure the performance of the programme

A system to check that standards are being met

Guidance and operational policies

Mechanisms to ensure the quality of the test

Failsafe systems

Quality improvement initiatives to support services to improve their quality.

# Indicators and standards

- Tell us how well the programme is working and point to where we might need to make changes

- Examples of important measures are
  - Proportion of the population with diabetes
  - Coverage,
  - Participation rates,
  - Detection rates and
  - Referral rates

- Comparing figures between services or parts of the country or over time help in identifying where more resources, equipment or training may be needed

# Guidance and operational policy

States how the pathway should work

It includes things such as;

- how often people should be tested,

- the grading system

- the referral threshold



| No disease visible | Mild nonproliferative diabetic retinopathy (NPDR) | Moderate nonproliferative diabetic retinopathy | Severe nonproliferative diabetic retinopathy | Proliferative diabetic retinopathy |

## Ensuring the quality of the test

Digital images enable double reading and audits to check for quality and support training.

It is still possible to use paper records of findings which can be used for audits and teaching to improve quality

Measuring detection and referral rates can also help in identifying quality issues
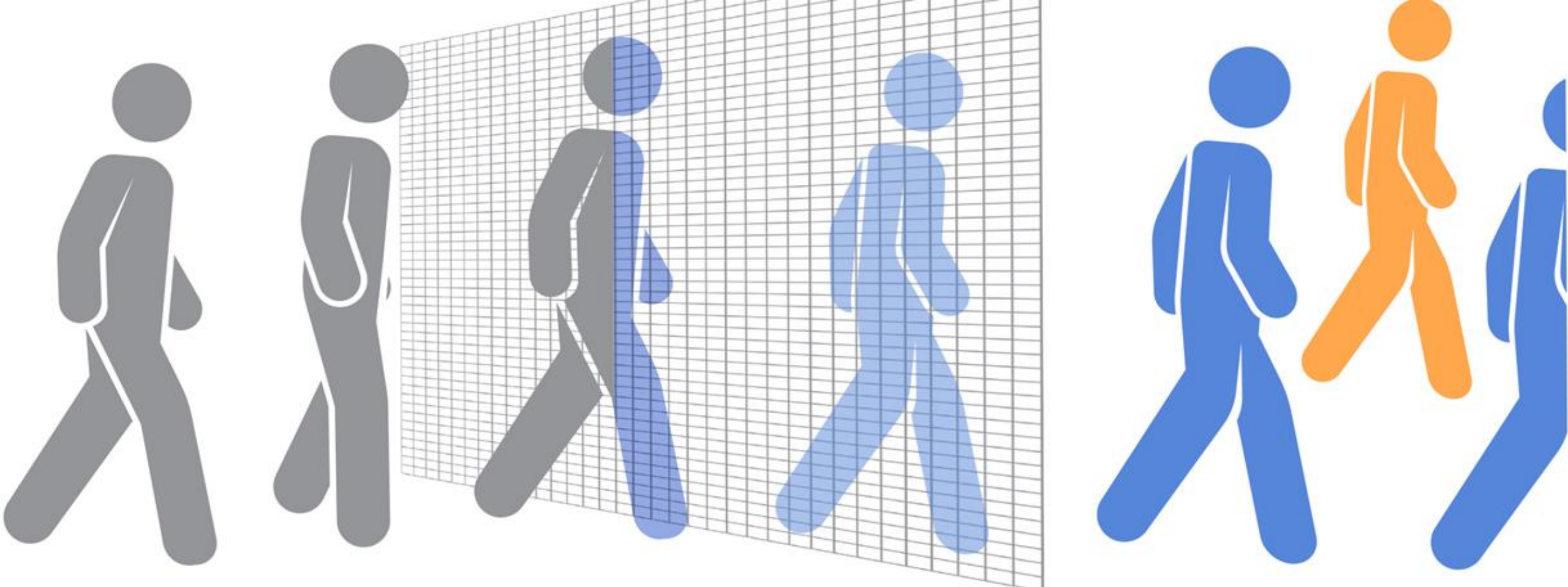
## Quality improvement and training

- Regular training for all staff members involved in screening
- Meetings between diabetologists and ophthalmologists to improve identification  and referral of people with diabetes
- Checking on the accuracy of lists (registers) of people with diabetes to use for invitations and making sure they are up to date
- Failsafe systems

# Governance

- Policy documents or national orders that describe a strategy for DR Screening
- Committees/groups and leaders who are responsible for implementing the strategy at national, regional and local level
- Oversight that the strategy is being implemented and a commitment to tackle barriers
- A strategy that is supported with guidance, protocols & operational policies

Increase effectiveness, maximize benefits and minimize harm

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