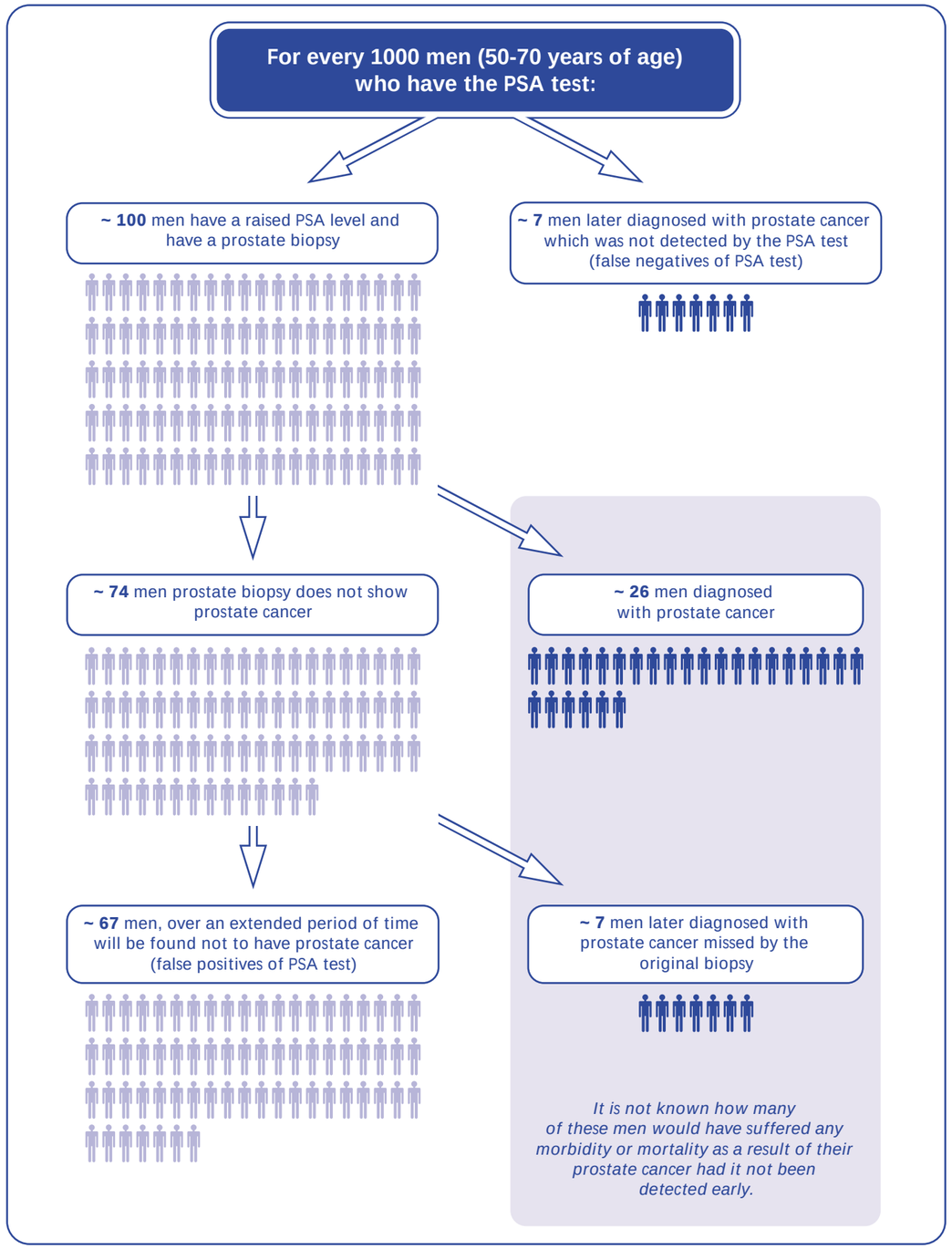
The outcome of PSA testing in 1000 men

The figure below is a simplified representation of what would happen to 1000 men who had a PSA test. The numbers are approximate and would be influenced by age and many other factors. The figure needs to be considered within the context of the information provided earlier on the key issues surrounding the PSA test.



Counselling men about prostate cancer risk and the PSA test

The Prostate Cancer Risk Management Programme aims to help the primary care team give clear and balanced information to men who ask about testing for prostate cancer.

Prostate cancer: background facts

- Prostate cancer is the second most common cause of cancer-related deaths in men.
- Each year in the UK approximately 20,000 men are diagnosed with prostate cancer and 9,500 die from the disease.
- Prostate cancer is rare below 50 with the median age of diagnosis 75 years. The risk is greater in those with a family history or those of African and African-Caribbean origin.
- Prostate cancers range from very aggressive tumours to slow growing tumours. Slow growing tumours are common and may not cause any symptoms or shorten life.

Key issues which men should understand

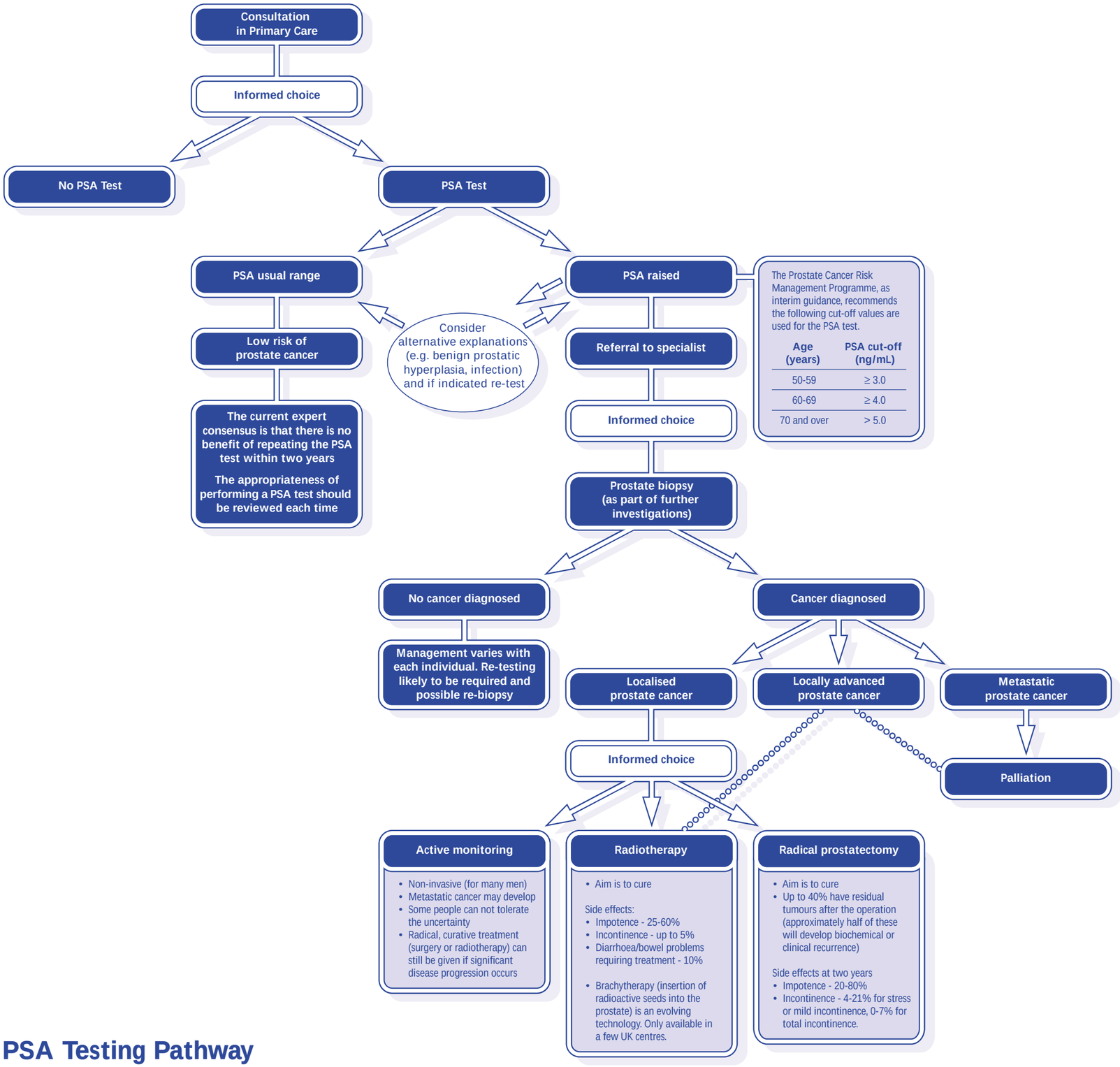
(1) The PSA test

- There is no good evidence to date that screening for prostate cancer using PSA testing reduces mortality.
- PSA testing is controversial: professionals disagree on the usefulness of the test for population screening.
- PSA testing aims to detect localised prostate cancer when potentially curative treatment can be offered.
- However, the PSA test has some problems:
  - Some men with clinically significant prostate cancer will **not** have a raised PSA (up to 20%).
  - About $^{2}/_{3}$ of men with a raised PSA test will **not** have prostate cancer.
- The PSA test is not diagnostic – if the PSA is raised, a prostate biopsy is required to diagnose cancer.
  - Complications from the biopsy may occur, including bleeding (~ 1 in 3 men get haematuria/haematospermia after biopsy) and infection.
  - Some clinically significant prostate cancers will be missed at biopsy (up to 20%).
  - If the biopsy is negative a period of follow-up and possible re-biopsy is likely.
- Most men describe the biopsy as an uncomfortable experience and some describe it as painful.
- Both the PSA test and prostate biopsy may cause men significant anxiety.
- Some men with potentially aggressive tumours detected following PSA testing may benefit from treatment.
  - Some cancers detected following PSA testing will be slow-growing and may never cause the man any symptoms or shortened life expectancy. Some men who are tested may therefore face unnecessary anxiety, medical tests, and treatments with side effects.
- PSA testing is not usually recommended for an asymptomatic man with less than 10 years life expectancy.

(2) Prostate cancer treatments

- The main treatment options for localised prostate cancer are active monitoring, radiotherapy and surgery.
- To date, there is no data from randomised controlled trials giving evidence about the optimum treatment for localised prostate cancer (see overleaf for details):
  - Active monitoring avoids unpleasant side effects but some men may develop metastatic disease.
  - Surgery and radiotherapy can carry significant side effects although they may offer the possibility of a cure.
- To date, there is no data from randomised controlled trials to say whether or not any treatment option reduces overall mortality in men with localised prostate cancer.

This summary was written in 2002 by Dr Eila Watson, Dr Lucy Jenkins, Colleen Bukach and Dr Joan Austoker, Cancer Research UK Primary Care Education Research Group. The summary is based on the information and references provided in the booklet, The PSA test and prostate cancer: information for primary care (1). Further information is also available at: http://www.nelc.org.uk (1) *Prostate Cancer Risk Management Programme: an information pack for primary care. NHS Cancer Screening Programmes; Sheffield: 2002.*



PSA Testing Pathway

The PSA Test: *the practicalities*

When taking blood you should ensure that the specimen will reach the laboratory and the serum be separated within 16 hours.

Samples should only be sent to laboratories which participate in the National External Quality Assessment Scheme (NEQAS).

Before having a PSA test men should NOT have:

- an active urinary infection
- ejaculated in the previous 48 hours
- exercised vigorously in the previous 48 hours
- had a prostate biopsy in the previous 6 weeks.

In primary care, digital rectal examination (DRE) is not recommended as a screening test in asymptomatic men. For symptomatic men, if practical, do the PSA test before the DRE. If not, it is recommended that the PSA test be delayed for one week.