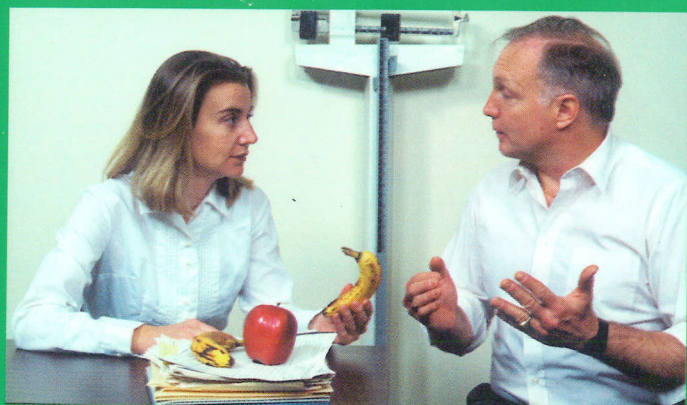
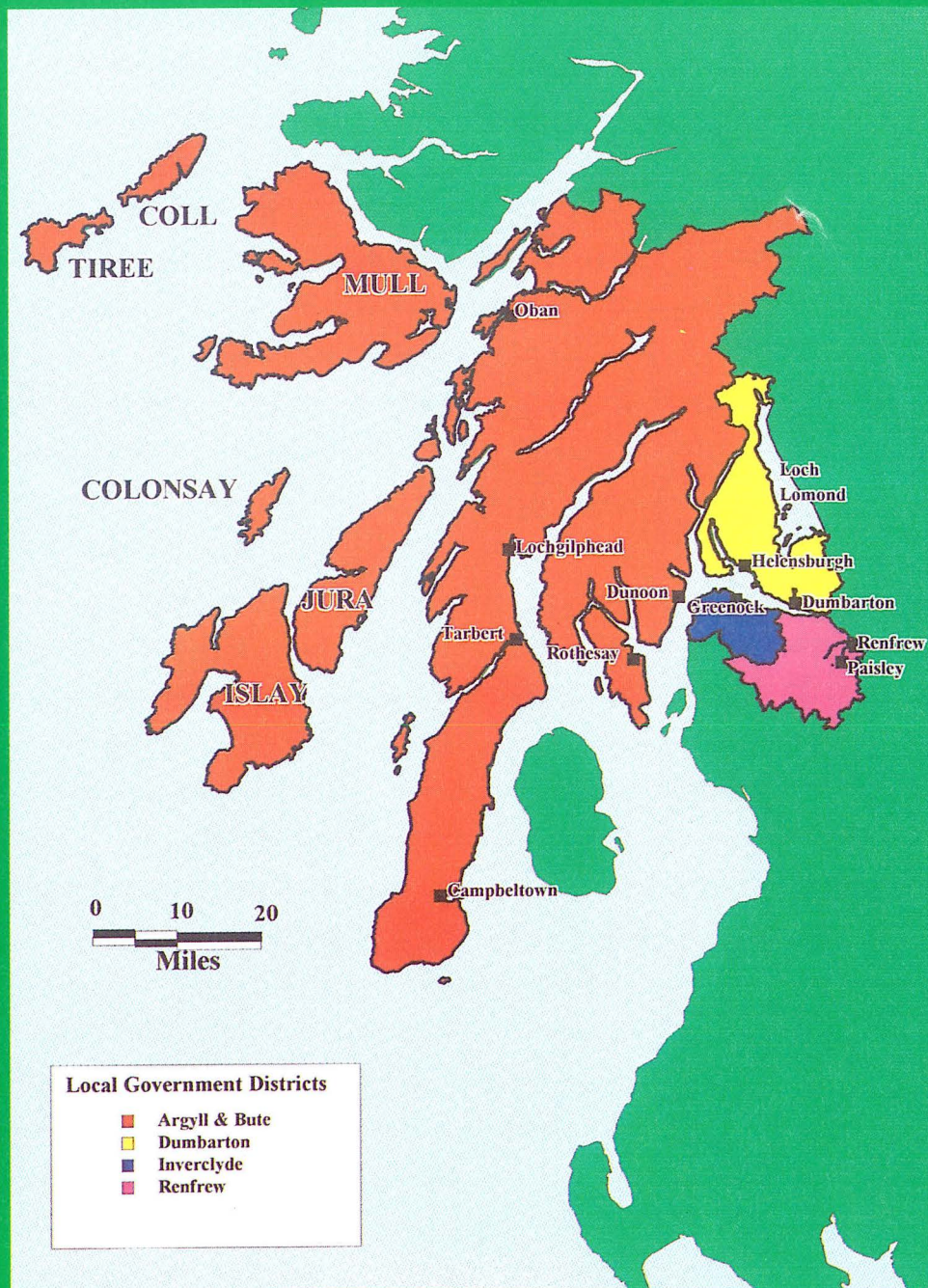


Challenges for Health in Argyll and Clyde



Annual Report of the
Director of Public Health 1995

Argyll and Clyde Health Board Area and Local Government Districts (Until April 1996)



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Introduction

The purpose of this independent report from the Director of Public Health for the Argyll and Clyde Health Board area is to highlight some aspects of health and illness affecting the residents of the area. Planners in the Health Board, in local authorities and in other agencies should use this information to shape their policies. It is also hoped that local people will find this of interest and will question further the policies developed on their behalf.

This year I would as before like to highlight some key points from the report.

- *Firstly I make no apology for the references to money and the use of resources. Unlike many other countries, the majority of people in this country rely for all their health care on a health service funded from general taxation. When choices have to be made within a limited budget, therefore, it is the business of all residents how those choices are made, especially as there is to all intents and purposes no*

comprehensive opt-out system available. If society is to obtain the maximum benefit (including improvements in health) from this money, it is and always has been necessary to look at choices. If choices are necessary then it is my opinion that it is better that some objective system is devised with the consent and involvement of the community to make these choices. The alternative is that decisions are made hidden from public scrutiny and guided by the values of individuals rather than those of the community. All that is asked in this report is that the public debate begins.

- *Once again we see the common theme of the importance of poverty as an explanation for differences in health and ill-health. Thus, there are wide differences in dental health between those areas of the Board which are affluent and those which are deprived. In the absence of water fluoridation, the nationally set target for children's dental health will be*

unachievable for certain groups, and the involvement of all agencies in a strategy for oral health must begin now. Thus far, my dental colleagues tell me of an enthusiasm from other agencies to help meet the aims of the strategy. Similarly, uptake of the breast and cervical screening programmes, while respectably high in this Board as a whole, does vary according to the affluence of the area.

- *Young people of today will determine how healthy this nation is in the future. The survey of young people's health shows the building blocks which are being laid for the future. Most young people have a good awareness of healthy and unhealthy behaviours, but some still make unhealthy choices about their lifestyle. By a number of ways we must make it easier and acceptable to them to make healthy choices. In the context of overall future health, exercise and good nutrition are arguably even more important*

messages than drug and sex education where attention is often concentrated. The casual and increasing use of alcohol is particularly worrying.

- This year an item is included on pharmacy issues, highlighting the important role which pharmacists can and do play in dealing with ill-health. However, there are some important areas for attention, not least the provision of confidential consultations if this role is really to develop.
- Once more the importance of infectious disease as a cause of ill-health is shown by the figures from the surveillance of disease. In many of these conditions, the work carried out by environmental health, microbiological, medical, nursing, public health and clerical staff in order to prevent the occurrence and spread of infection may be unglamorous and not very visible but is essential to the health of the community.

- Finally, the changes in local government within Argyll and Clyde which took effect on 1 April 1996 are indicated for easy reference in a pair of maps inside the front and back covers of the report. Whilst the Health Board area itself has not changed, we now have to work closely with a total of five councils in a joint approach to health issues.

I would like to thank all the contributors to this report, who are acknowledged for the first time beside their contributions. I would especially thank Helen Smith and Alison Burlison for editing the report, Barbara Parrish for the typing, and Irene Raine and Irene Maclean for its production.

I hope you find something to interest you and I would welcome any comments and inquiries you may have. It's your health and health service after all!

Lesley Wilkie, Director of Public Health
August 1996



Life and Death in Argyll and Clyde



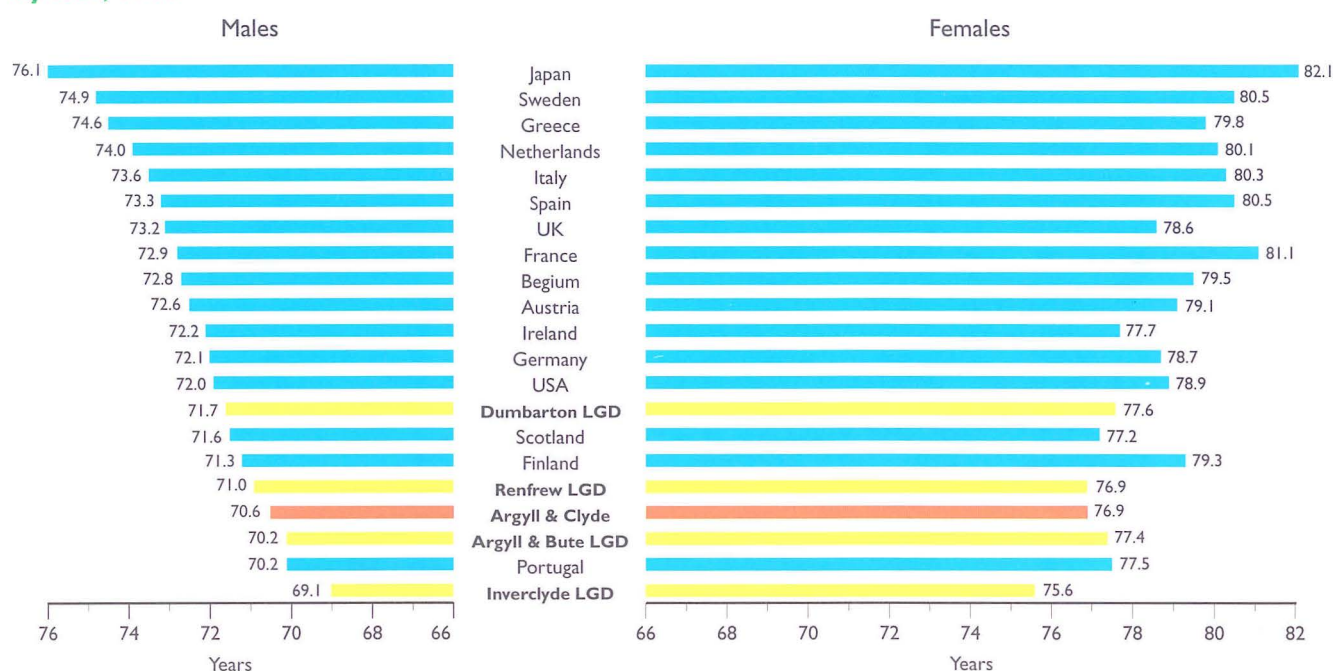
How Long Does the Average Resident of Argyll and Clyde Live?

The average person born in Argyll and Clyde in 1993 would be expected to live for 70.6 years if male and 76.9 years if female. These lifespans are shorter than those calculated for the whole of Scotland, which in turn are short compared to the UK as a whole and to many other industrialised countries (Figure 1).

This Figure also shows that there is considerable variation among the four Local Government Districts (LGDs) which together comprised the Argyll and Clyde Health Board area until 1 April 1996. Dumbarton residents have the longest and Inverclyde residents the shortest predicted lifespans, with Argyll and Bute and Renfrew intermediate.

Figure 1

Average Life Expectancy at Birth in 15 Industrialised Countries, the UK, Argyll and Clyde and its Four Local Government Districts, by Sex, 1991*



* Calculations based on 1993 for Scotland, Argyll and Clyde and its four LGDs. Sources: WHO/ISD, GRO(S)

The good news is that average life expectancy in the Health Board area has increased by 2.1 years for each sex between 1982 and 1993 (Table 1). Each of the four districts has also experienced an increase. However, the district with both the shortest lifespans and the greatest overall level of socio-economic deprivation - Inverclyde - tended to have the smallest increases (1.6 years for males and 1.3 years for females). This supports other evidence that the rich/poor divide is increasing with time.

Table 1

**Average Life Expectancy at Birth, by Sex
Scotland, Argyll and Clyde and its Four Local Government Districts
1982, 1993 and Increase over the 11 Years**

Area	Average Life Expectancy at Birth (Years)					
	Males			Females		
	1982	1993	Increase	1982	1993	Increase
Scotland	69.4	71.6	2.3	75.5	77.2	1.7
Argyll & Clyde	68.5	70.6	2.1	74.7	76.9	2.1
Argyll & Bute LGD	68.8	70.2	1.5	75.0	77.4	2.3
Dumbarton LGD	69.7	71.7	2.0	75.2	77.6	2.4
Inverclyde LGD	67.6	69.1	1.6	74.3	75.6	1.3
Renfrew LGD	68.4	71.0	2.6	74.7	76.9	2.2

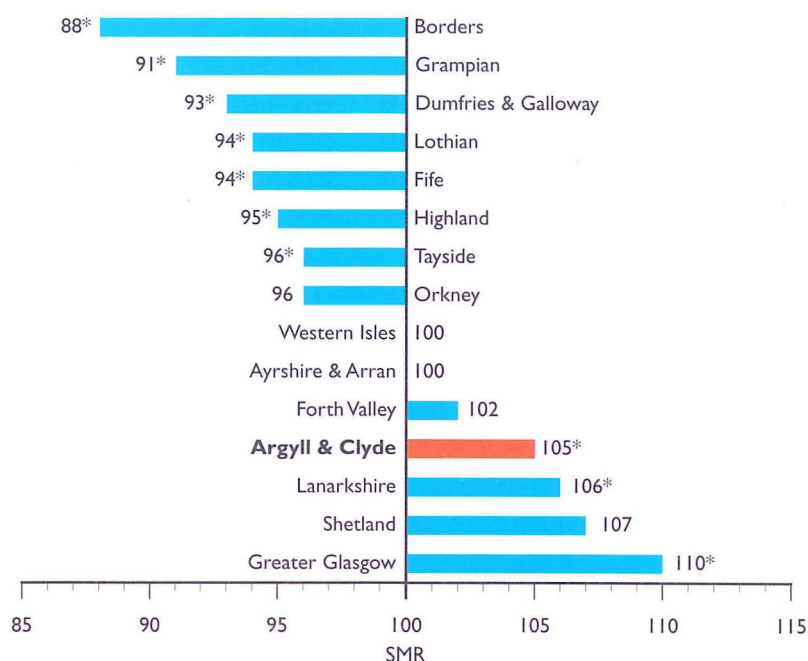
Source: GRO(S)

How do Death Rates in Argyll and Clyde Compare with Scotland?

As life expectancy is lower in Argyll and Clyde than in Scotland, the death rate is obviously higher. Of the 12 mainland Health Boards in Scotland, Argyll and Clyde had the third highest all-cause standardised mortality ratio (SMR) in 1994, as shown in Figure 2. The SMR of 105 indicates a death rate 5% higher than the Scottish average, after age- and sex-standardising to remove any effect of differences in the population structure.

Figure 2

**Standardised Mortality Ratios for the Scottish Health Boards
All Causes, All Ages, 1994**



If SMR is statistically significant ($p < 0.05$), it is highlighted by *. Scotland = 100. Source: GRO(S)

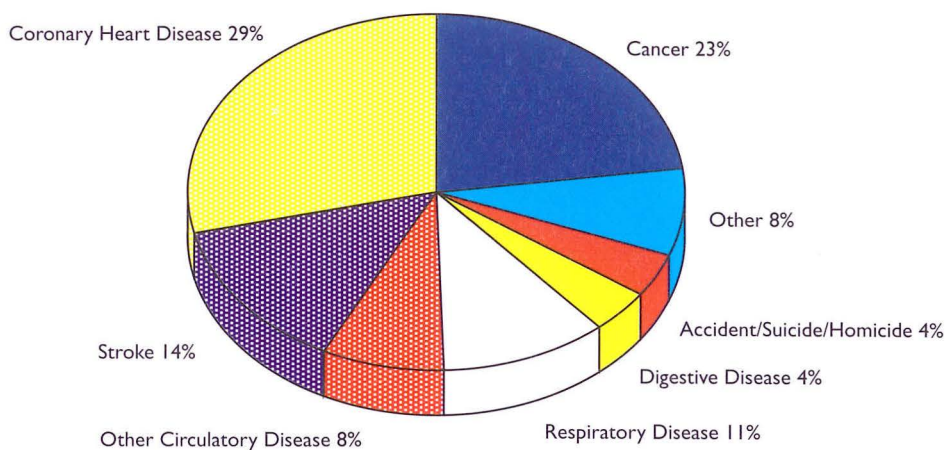
From Which Illnesses do People in Argyll and Clyde Die?

Having established that life expectancy is lower and death rates are higher in Argyll and Clyde than in Scotland, and that there are variations among districts, what are the diseases causing the higher death rates locally?

Approximately half the deaths in Argyll and Clyde are due to circulatory problems, mainly coronary heart disease ('heart attacks') and strokes (Figure 3). Almost a further quarter of deaths are due to cancer, the main sites being the lung and digestive tract in both sexes, and breast in women.

Figure 3

**Major Causes of Death in Argyll and Clyde
All Ages, Both Sexes, 1981 - 1993**



Source: GRO(S)

Gender Differences

It has already been shown that in Argyll and Clyde, women live on average over six years longer than men. Almost two-thirds of all deaths in the under 65 year olds occur in males; over the period 1981-1993, there were on average 858 male deaths per year in this age group, compared with 519 female deaths.

Table 2 shows that for people of all ages, slightly more females than males die each year. Males have a slightly higher chance of dying from all cancers than do females, but for lung cancer there are more than twice as many male deaths as female deaths. While more men than women die from coronary heart disease, far more women than men suffer fatal strokes. Men are more likely to die as a result of accidents, particularly motor vehicle traffic accidents where there are over twice as many deaths. Suicide and homicide are each over twice as likely in men as in women.

Coronary Heart Disease

Over the 13-year period 1981-1993, mortality in Argyll and Clyde from coronary heart disease was 6% higher than the Scottish average, after allowing for differences in the population structure (Figure 4). The SMRs were particularly high in Inverclyde and Renfrew districts (10% above).

Table 2

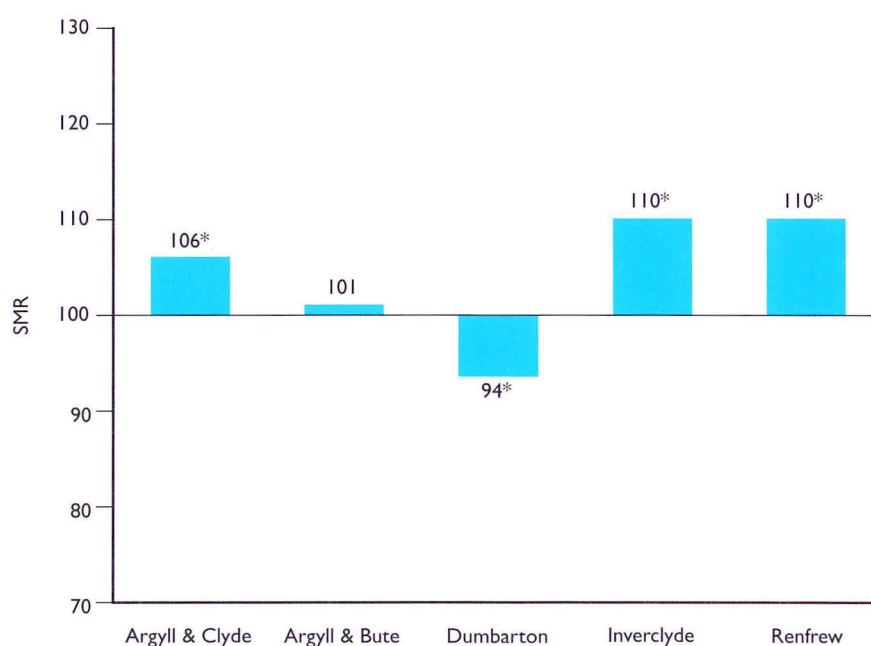
Deaths in Argyll and Clyde, All Ages, by Sex and Cause Average Number per Year and Male/Female Ratio, 1981 - 1993

Cause	No. of Deaths		Male/Female Ratio
	Males	Females	
All Causes	2,679	2,835	0.9
All Cancers	653	613	1.1
Lung Cancer	266	116	2.3
Coronary Heart Disease	869	740	1.2
Stroke	282	496	0.6
Accidents	92	72	1.3
Motor Vehicle Traffic Accidents	30	13	2.3
Suicide	33	12	2.7
Homicide	7	3	2.5

Source: GRO(S)

Figure 4

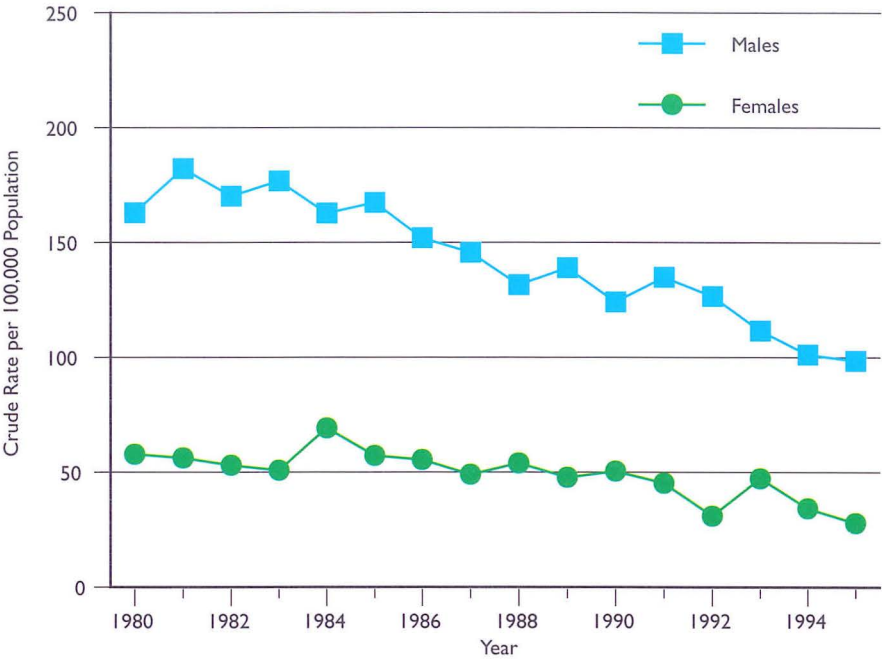
Standardised Mortality Ratios for Coronary Heart Disease Argyll and Clyde and its Four Local Government Districts All Ages, Both Sexes, 1981 - 1993



If SMR is statistically significant ($p < 0.02$), it is highlighted by *. Scotland = 100. Source: GRO(S)

Males have a higher rate of coronary heart disease deaths than females, but Figure 5 shows that rates are decreasing over time, particularly for men under 65 years old.

Figure 5
Time Trends for Death Rates for Coronary Heart Disease in Argyll and Clyde
Ages 0 - 64 Years, by Sex, 1980 - 1995

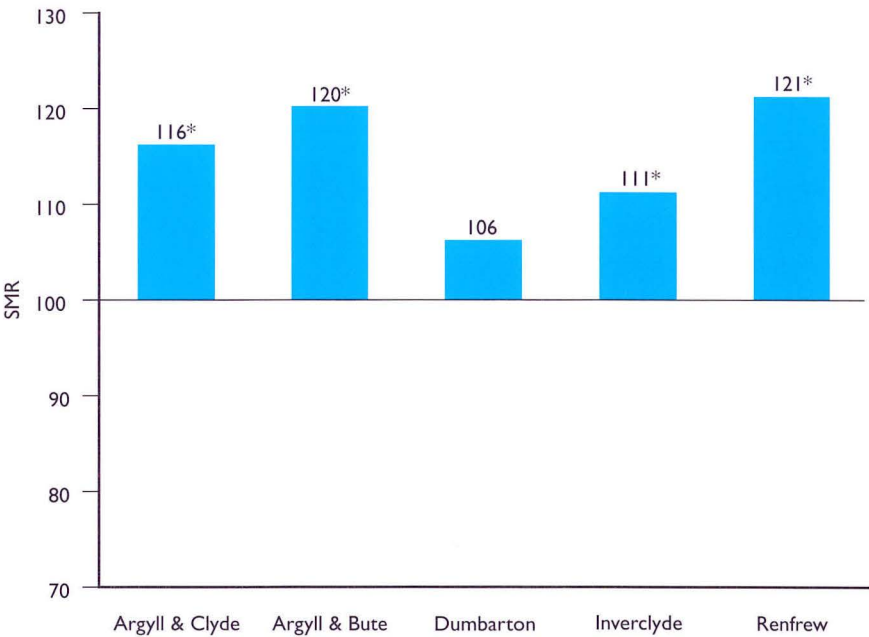


Source: GRO(S)

Strokes

There is a marked excess of stroke mortality in Argyll and Clyde (16% above the Scottish average), with Argyll and Bute and Renfrew showing the largest local excesses (Figure 6).

Figure 6
Standardised Mortality Ratios for Strokes
Argyll and Clyde and its Four Local Government Districts
All Ages, Both Sexes, 1981 - 1993

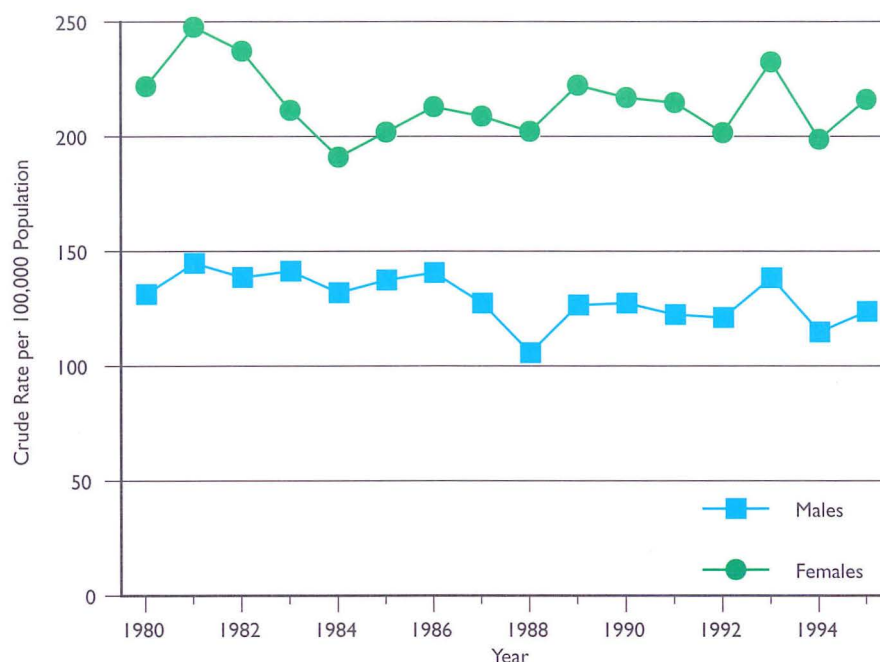


If SMR is statistically significant ($p < 0.02$), it is highlighted by *. Scotland = 100. Source: GRO(S)

Unlike coronary heart disease, death rates from strokes are similar in both sexes in the under 65 year age group. However, most strokes occur in the elderly, and thus in women (Figure 7).

Figure 7

**Time Trends for Death Rates for Strokes in Argyll and Clyde
All Ages, by Sex, 1980 - 1995**



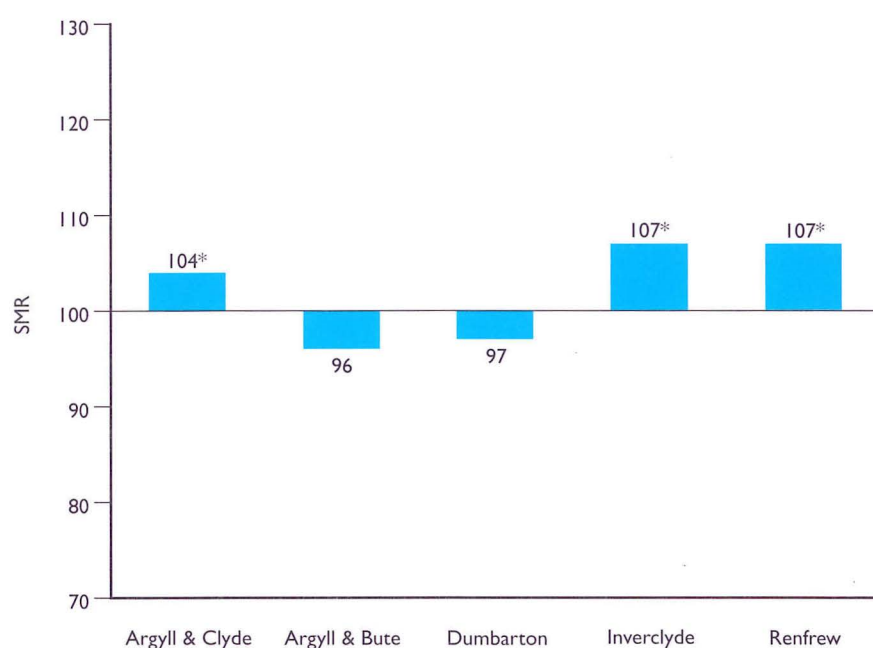
Source: GRO(S)

Cancers

The SMR for all cancers was 104 in Argyll and Clyde, with Inverclyde and Renfrew having the highest ratios at 107 (Figure 8). The situation was even worse for lung cancer, where these two areas each had a 16% excess of deaths compared to the national average (Figure 9).

Figure 8

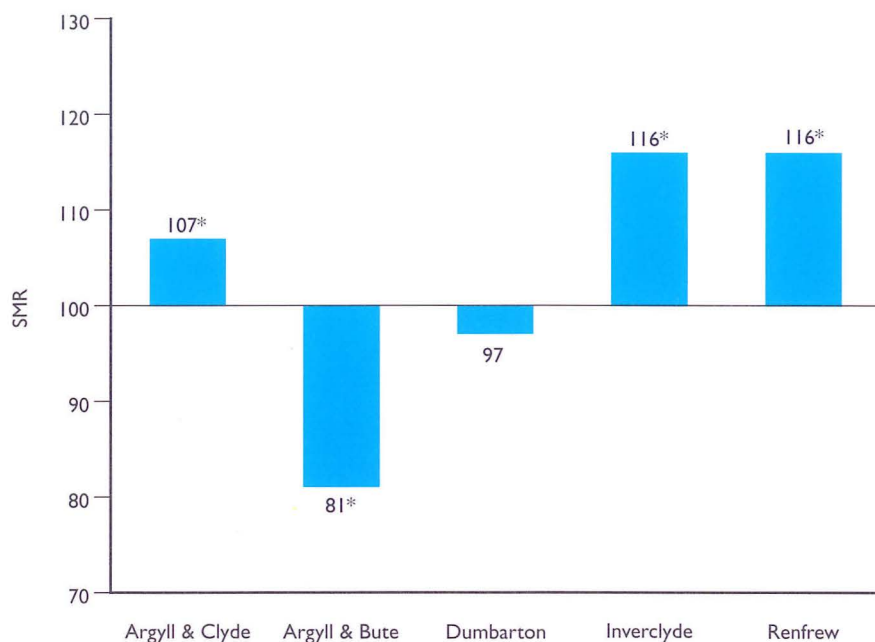
**Standardised Mortality Ratios for All Cancers
Argyll and Clyde and its Four Local Government Districts
All Ages, Both Sexes, 1981 - 1993**



If SMR is statistically significant ($p < 0.02$), it is highlighted by *. Scotland = 100. Source: GRO(S)

Figure 9

Standardised Mortality Ratios for Lung Cancer
Argyll and Clyde and its Four Local Government Districts
All Ages, Both Sexes, 1981 - 1993



If SMR is statistically significant ($p < 0.02$), it is highlighted by *.

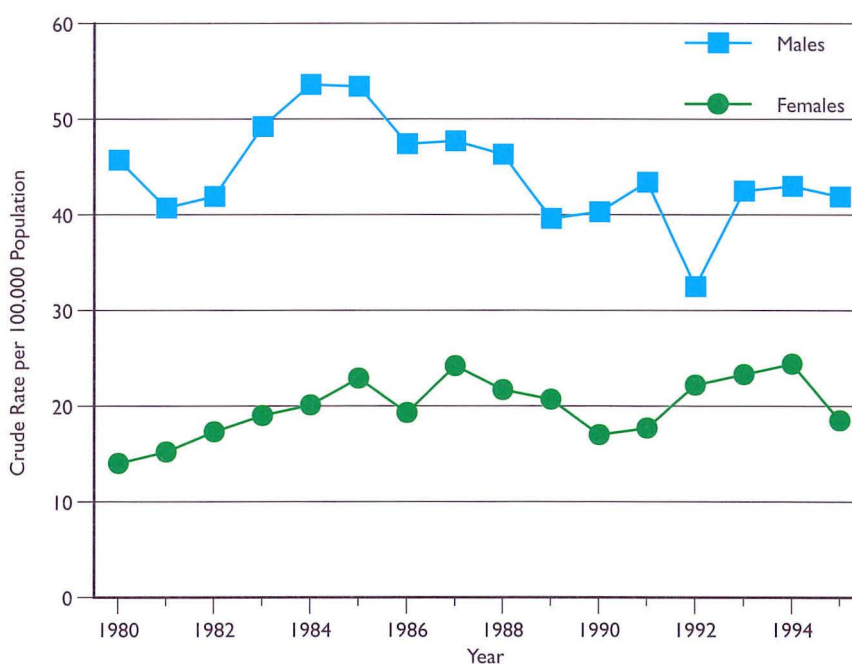
Scotland = 100.

Source: GRO(S)

One important observation is the increasing trend in the under 65 year old female lung cancer death rates since the early 1980s (Figure 10). This increase is thought to reflect the smoking 'epidemic' in young women between the 1940s and early 1960s. By contrast, smoking rates in men fell during that same period (the male smoking epidemic peaked around 25 years before the female epidemic). This probably explains the tendency for the death rate in men under 65 to decrease between the mid-1980s and mid-1990s. Based on the smoking patterns of the last 30 years, one would expect the male death rate to continue to tend to fall in the foreseeable future, and the female rate to stop increasing and start to decline around the year 2000.

Figure 10

Time Trends for Death Rates for Lung Cancer in Argyll & Clyde
Ages 0 - 64 Years, by Sex, 1980 - 1995



Source: GRO(S)

Other Diseases

Other diseases where there was a significantly higher SMR in Argyll and Clyde than in Scotland included:

- *diseases of the respiratory system (6% higher). Particularly high in Inverclyde.*
- *diseases of the digestive system (27% excess). Some of this mortality was alcohol-related, for example alcoholic liver disease and cirrhosis which was 42% higher than the Scottish average.*

Conclusion

One of the functions of the Health Board's Public Health Department is to monitor mortality, as a proxy for morbidity or illness in the Argyll and Clyde population, and to investigate variations among different geographical areas and socio-economic groups. This can assist in the planning and targeting of health service resources, and health promotion and preventive activity.

Ensuring an equitable distribution of, and universal access to, high quality health services does play a part in improving health and lowering mortality levels. However, people's health and life expectancy are also closely linked to their living environment, economic situation and resultant lifestyle choices/limitations. These include exercise, diet, and cigarette and alcohol consumption. There is a continuing need for everyone to promote health in this broader context.

Christian Gunneberg, Consultant in Public Health Medicine

Alison Burlison, Senior Information Officer

Duncan McColl, Information Officer

Young People's Health Survey 1995



This health survey was undertaken to identify patterns of both healthy and 'risky' behaviour in young people at seven secondary schools in Argyll and Clyde, six of which had participated in a previous survey, in 1992. In the previous survey, only pupils from the first and third year were asked to complete the questionnaire. In 1995, a total of 1,866 pupils in first, third and fifth year completed questionnaires, with most pupils aged 11-12 years, 13-14 years and 15-16 years respectively. There were approximately equal numbers of boys and girls in the sample overall, but there was a slight bias towards third year girls, with fifth year boys slightly under-represented (Table 3).

The questions in the survey covered general health and diet, sport and leisure, smoking, alcohol, drugs, relationships and sexual activity. The findings for 1995 are summarised in the following sections. Comparisons with the 1992 results are provided where appropriate.

General Health & Diet

- 65% of girls worried about gaining weight, and 52% worried about eating too much;
- More than twice as many girls (29%) as boys (14%) thought that they were overweight;
- 70% of pupils did not consider that they ate a healthy diet, and 70% said that they did not get enough information about what they should eat;
- Girls were more likely than boys not to eat breakfast, and unfortunately the percentage of girls not eating breakfast has increased over time, from 25% of girls in first and third years in 1992, to 32% for the same school years in 1995;
- It is encouraging that in 1995, 86% of pupils ate fruit daily;
- 78% of pupils ate vegetables daily, whereas in 1992 only 30% of boys and 50% of girls ate vegetables on 'most days';

Table 3

Number of School Pupils, by Sex and School Year, Who Participated in Argyll and Clyde Health Board's Young People's Health Survey 1995

Year at School	No. of Respondents		
	Males	Females	Total
First Year	323	298	621
Third Year	319	345	664
Fifth Year	274	307	581
Total	916	950	1,866

Source: Argyll and Clyde Health Board

- Consumption of low fat milk has increased, from 34% of pupils surveyed in 1992 to 83% of pupils surveyed in 1995;
- However, little has changed between 1992 and 1995 with regard to consumption of high fat foods such as chips, with 32% of pupils claiming to eat chips on most days in both surveys.

Sport and Leisure

- The average length of time spent exercising in a week was 5.4 hours for boys and 3.6 hours for girls;
- Overall, 12% of pupils claimed to have a health problem which prevented them from taking exercise (the percentage was highest (16%) for the school in

the most affluent area, which also had the highest level of children claiming to have asthma (20%));

- The frequency of taking vigorous exercise decreased in girls as they got older, whilst boys maintained their levels of exercise.

Smoking

- 18% of boys and 27% of girls were regular or occasional smokers. Girl smokers generally started smoking before third year, while boys continued to take up smoking throughout secondary school;
- As in 1992, a large percentage of smokers stated that they wanted to quit (86% in 1995 compared to 80% in 1992).

Alcohol

The pupils surveyed were asked about their alcohol-related beliefs and practices, and the results are summarised in Table 4.

Table 4
Alcohol-Related Beliefs and Practices, by Sex and School Year
Argyll and Clyde Health Board's Young People's Health Survey 1995

	Sex		Year at School		
	Male	Female	First	Third	Fifth
Beliefs - % agreeing or strongly agreeing:					
Drinking helps to relax	42	34	22	40	51
Drinking is sociable	52	41	29	48	64
Purchasing under 18 okay	32	23	13	33	36
Practice (%):					
Regular drinkers - at least once a month	48	50	18	55	71
Frequent drinkers - at least weekly	22	21	6	26	32

Source: Argyll and Clyde Health Board

Overall, boys were more likely to view alcohol as an acceptable part of their lives than girls. However, the percentage of pupils drinking either regularly or frequently was similar for each sex. As might be expected, alcohol became more acceptable in the older age groups, and a higher percentage were drinkers.

Amongst regular drinkers (those drinking at least once a month) other useful findings on alcohol were:

- 17 first year pupils (3% of all first years) claimed that they regularly drank alcohol at youth clubs;

- About 1 in 3 claimed that they were getting their drink from off-licences;
- 43 boys and 46 girls (11% of both boys and girls who drank regularly) claimed to drink more than the medically recommended maximum **adult** limits of 21 and 14 units per week for each sex respectively;
- Boys preferred cans or bottles of lager, beer or shandy, whereas girls preferred spirits or wine.

Drugs

- The percentage of first year pupils who had been offered drugs was the same as in 1992 - 20%;

- This figure rose to 75% by fifth year;
- 54% of fifth year pupils claimed to have tried cannabis, with 19% of males and 7% of females claiming to take it regularly;
- 5% of fifth year pupils claimed to have tried ecstasy and 15% temazepam (both of which can be potentially lethal).

Of those who claimed to take drugs:

- In first year, 30% claimed it helped them to relax - this rose to 75% in fifth year;
- 20% of first year pupils claimed to take drugs when no-one else was present (a particularly dangerous practice);
- 58% of all respondents stated that they take drugs at raves.

Relationships and Sexual Activity

- 29% of all pupils who were surveyed stated that they had experienced sexual intercourse (27% of the under-16 year olds);
- 43% of boys and 52% of girls knew where to get contraceptive advice locally;
- In fifth year, girls were more likely to state that they knew where to get free condoms than boys

(78% compared to 54% respectively).

These issues were not covered in 1992.

Conclusion

This study has provided valuable information on the health behaviours, attitudes and knowledge of school pupils across Argyll and Clyde, and the Health Board is grateful to all schools and pupils who took part.

The results suggest that this generation of school pupils has certain risk behaviours which are likely to be to the detriment of their health, if not now, then in the next 10, 20 or 30 years or so of their adult life. Poor dietary habits and lack of exercise are risk factors for a range of circulatory problems, digestive diseases and certain cancers. It is well known that smoking causes lung cancer and cardiovascular disease, whilst excessive alcohol intake can lead to major health and social problems.

The availability of drugs to schoolchildren continues to be a major cause for concern. Regarding the high level of sexual activity, it is important to ensure that education focuses on the value of relationships, and the

risks and ways of avoiding unwanted pregnancy, sexually transmitted diseases and HIV/AIDS.

The results of this survey have been discussed with the seven participating schools by Health Promotion Officers from the Health Board. A multi-disciplinary Action Committee will be formed Board-wide to tackle the problems identified and to set new targets for young people's health.

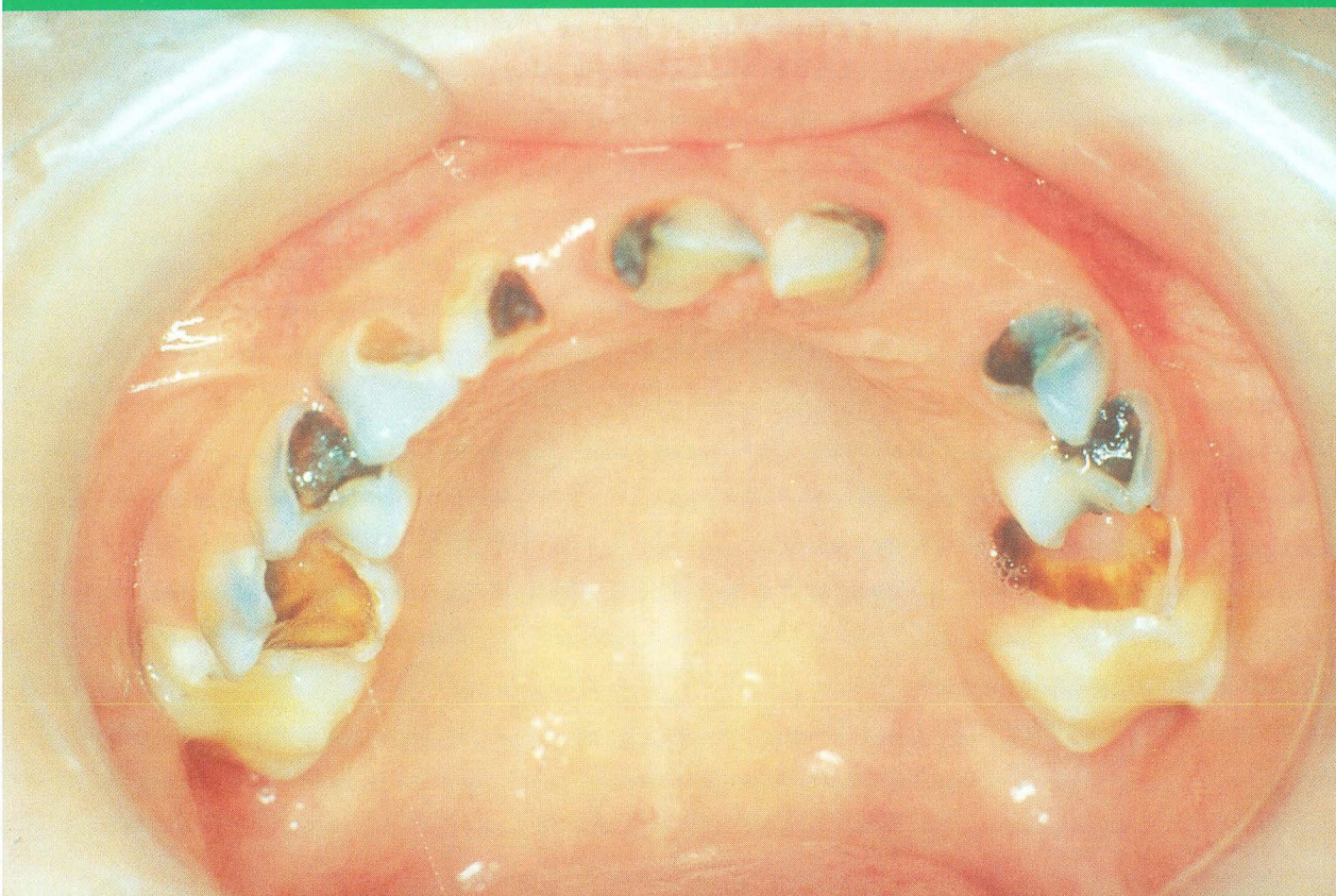
In addition, young people are already involved at a local and community level in activities to promote their own health. Projects include School Nutrition Action Groups which address issues such as lunch provision, and the Healthy Teen Project which tackles drug misuse throughout the Board area. There is a SHITTT Clinic (Sexual Health Information for Teens and Twenties) at Greenock, Port Glasgow and Ferguslie Park, whilst Q Zone in Ferguslie Park and the Zodiac project in Inverclyde both deal with general health matters affecting young people.

Grace Moore,

Senior Health Promotion Officer - Education

Alister Hooke, Alcohol Development Officer

Dental Health and Deprivation



Introduction

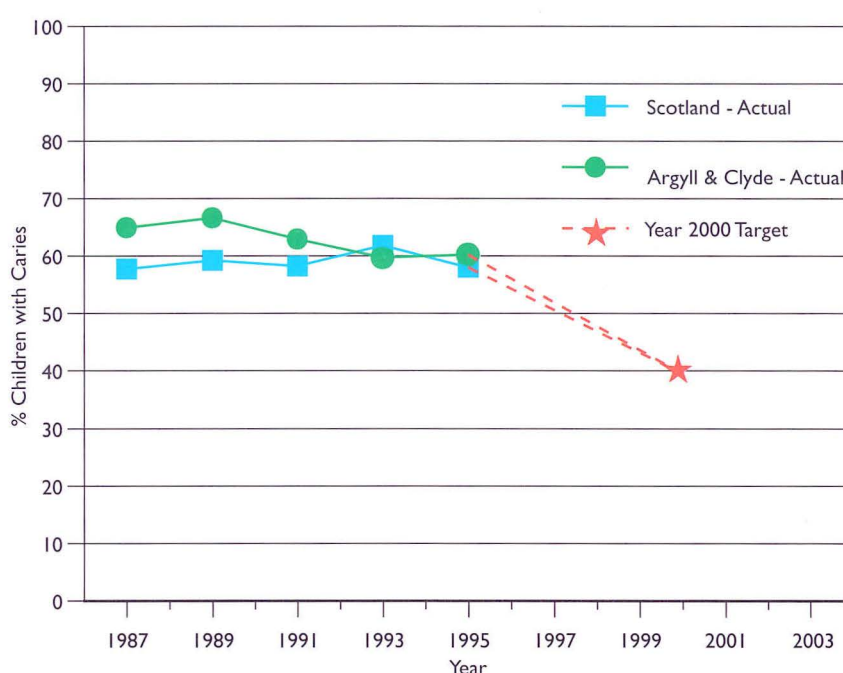
The inequalities in general health between people living in affluent and deprived communities apply also to oral and dental health (the health of the mouth, gums and teeth). Scotland was first included in UK surveys of the dental health of children in 1983, and these surveys indicate both higher levels of disease in children from more deprived areas and that Scotland has a worse dental health record than England or Wales.

Five Year Olds

The 1993 Annual Report noted an apparent improvement in the dental health of five year old children in Argyll and Clyde between 1991 and 1993. The percentage of children found to have decayed, extracted or filled teeth when surveyed by the Scottish Health Boards' Dental Epidemiological Programme (SHBDEP), had fallen from 63% to 60%. However, the results of the 1995 survey show that there has been no further improvement, and indeed Argyll and Clyde is once more in a slightly worse position than all-Scotland (60% of children with dental caries compared with 59% nationally) (Figure 11). It would seem very unlikely, in the absence of water fluoridation, that the 40% target set nationally will be reached by either Argyll and Clyde or Scotland by the year 2000.

Figure 11

Percentages of Five Year Old Children in Scotland and Argyll and Clyde with Dental Caries, 1987 - 1995 and Year 2000 Target



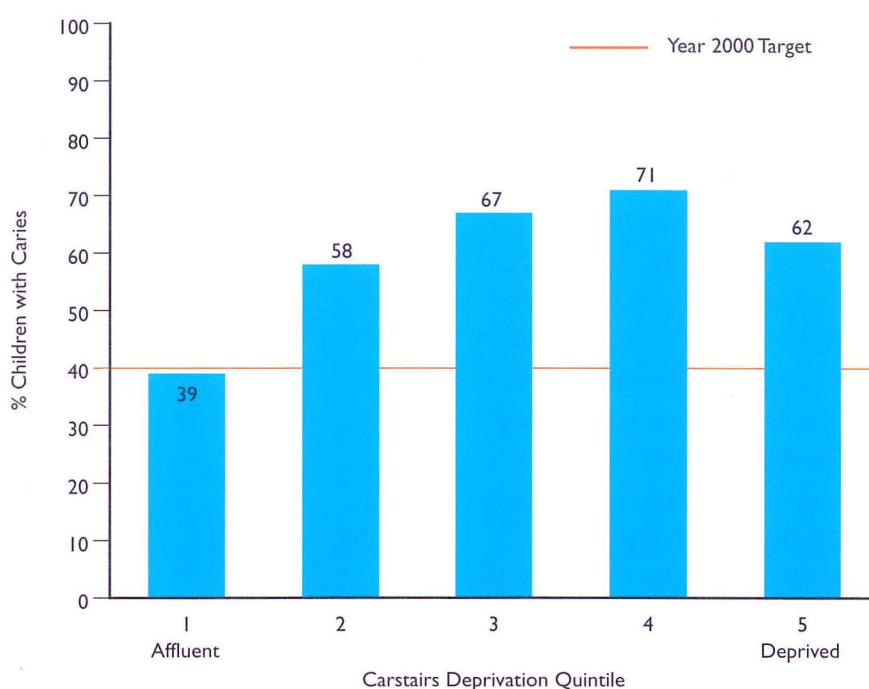
Source: SHBDEP surveys

The 1993 survey data for Argyll and Clyde have recently been analysed by Carstairs deprivation quintile. (These quintiles are basically fifths of the population, each comprising the residents of a group of postcode sectors with a similar Carstairs Deprivation Index - a measure derived from indicators of poverty measured in the 1991 Census. A more detailed description is given in the 1994 Annual Report.)

Each of the five groups or quintiles had a sample size of between 53 and 86 children. The percentage of children experiencing dental decay ranged from only 39% in quintile 1 (the most affluent areas), to 71% in quintile 4 (moderately deprived areas) (Figure 12). For some reason, quintile 5 (the most deprived areas) did not conform to the trend, having a relatively low figure (62%), but nevertheless the overall trend was statistically significant. It is interesting that children from the most affluent areas have already achieved the 40% target, but obviously the other four quintiles all have particularly high levels of dental disease.

Figure 12

Percentages of Five Year Old Children in Argyll and Clyde with Dental Caries, by Deprivation Quintile, 1993



Source: SHBDEP survey 1993

The analysis also identified a similar marked trend in the average number of decayed, extracted and filled teeth per child. This ranged from 1.3 for children from the most affluent areas (quintile 1), to nearly three times that number - 3.7 - for those resident in the moderately deprived areas (quintile 4). Again, quintile 5 bucked the trend, having on average 2.6 decayed, extracted and filled teeth per child.

The 1995 SHBDEP survey data will also be analysed by deprivation quintile, at both local and national level, to obtain further information on the effects of poverty on children's dental health. However, there are strong indications that in areas of deprivation, the onset of dental decay occurs at a younger age, the disease is more severe, and the rate of progression is faster than in more affluent areas.

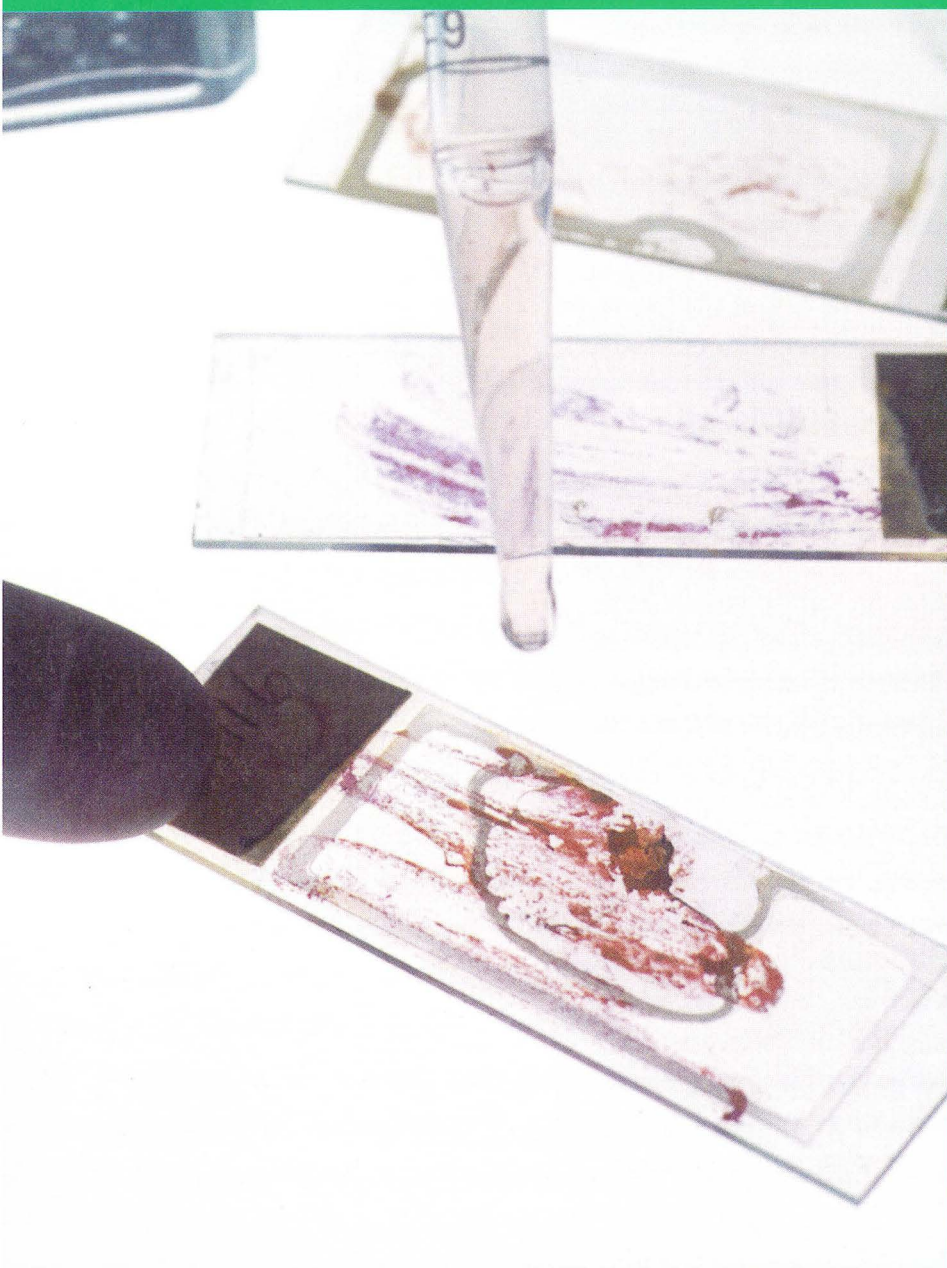
These trends are largely due to dietary factors, with children from more deprived areas being less likely to be breastfed as babies

and more likely to have sugary drinks introduced to the diet from an early age. In addition, national surveys show that those from deprived households are less likely to be registered with a family dentist. At present in Argyll and Clyde, only 37% of children under 6 years old and 15% of children under 3 years old are registered with a General Dental Practitioner.

The Health Board and the Trusts' Community Dental Services are targeting various dental health initiatives at schools within the more deprived parts of Argyll and Clyde. At the end of December 1995, the Scottish Oral Health Strategy was published, and the Board is now developing its local operational plan. This involves working in liaison with health professionals and other agencies which can have a significant influence on oral and general health, and the aim is gradually to improve the Board's and Scotland's poor dental health record.

Patrick Sweeney, Senior Registrar in Dental Public Health

Cervical Cytology Screening Programme



Screening

The Argyll and Clyde Cervical Cytology Screening Programme is part of the national screening programme, but it is applied locally, based upon a Health Board health needs assessment and purchasing plan. Detailed service specifications are in place with the various providers to the Board, and a formal monitoring and co-ordination process is firmly established.

Systematic screening began in Argyll and Clyde in 1989. By the end of 1993, virtually all eligible women aged 20 - 59 years had received at least one invitation to attend for a cervical smear test. Routine recall for further cervical smear tests currently takes place on a three yearly cycle.

By the end of 1995, 81% of eligible women had a record of at least one smear test within the previous 5.5 years, and 73% within the previous 3.5 years. The Health Board is on target with regard to screening uptake; nationally, the

target is to achieve and sustain at least 80% coverage within the previous 5.5 years. Local research into acceptability of the programme appears to show that media coverage and other aspects associated with the review of smear tests in Inverclyde in 1993 have not had a long-term detrimental effect upon the programme.

The aim of the programme is to ensure the earliest possible detection of cervical cancer. It is increasingly the case that women being diagnosed with cancer of the cervix are identified as a direct result of the systematic screening programme, and the cancers are usually at an early stage when they are easier to treat and the outcome for the woman is better.

Table 5

Numbers of Argyll and Clyde Women Aged 20 - 59 Years Screened for Cervical Cancer, by Deprivation Quintile, 1995

Deprivation Quintile	Total No. of Women Aged 20-59 Years	Percentage Screened in Previous 3.5 Years	Percentage Screened in Previous 5.5 Years
1 Most Affluent	24,521	76%	82%
2 Moderately Affluent	25,225	74%	80%
3 Average	23,955	74%	81%
4 Moderately Deprived	23,585	72%	79%
5 Most Deprived	25,215	69%	78%
Total	122,501	73%	81%

Source: Argyll and Clyde Health Board Cytology Database

Deprivation, Screening and Cervical Cancer

Many factors are known to influence screening test acceptance, including age and socio-economic status. To examine the effect of socio-economic status within Argyll and Clyde, the 1995 test rates were analysed by deprivation quintile. (These quintiles are basically fifths of the population, each comprising the residents of a group of postcode sectors with a similar Carstairs Deprivation Index - a measure derived from indicators of poverty measured in the 1991 Census. A more detailed description is given in the 1994 Annual Report.)

The results showed clear differences in acceptance rates, with lower rates for increasingly poorer deprivation quintiles (Table 5). This is statistically significant for the coverage at both 3.5 years and 5.5 years, and does not appear to be due to different age structures in the quintiles. The spread of the acceptance rates is, however, relatively small, and throughout the Board area the rates are steadily improving over time.

Alongside the lower screening rates in the more deprived groups, there would appear to be higher rates of cancer diagnosed. Table 6 shows that among women of screening age, 25 from the most deprived quintile were found to have squamous cervical cancer (the particular type of cancer the programme aims to detect) over the four-year period 1992-1995. This compares with only seven cases in the most affluent quintile, although the populations are broadly similar in each quintile. The numbers of cases involved are relatively small, and further studies on larger datasets are ongoing, but the trend for the incidence of squamous cervical cancer to increase with socio-economic deprivation is statistically significant. One encouraging feature, however, is that overall more cases were detected through screening (41 women) than by presenting with symptoms (33 women).

Table 6
Numbers of Argyll and Clyde Women Aged 20 - 59 Years Presenting with Squamous Cervical Cancer, by Deprivation Quintile, 1992 - 1995

Deprivation Quintile	Total No. of Women Aged 20-59 Years	No. with Squamous Cervical Cancer		
		Total	Screen-Detected	With Symptoms
1 Most Affluent	24,521	7	3	4
2 Moderately Affluent	25,225	13	7	6
3 Average	23,955	10	7	3
4 Moderately Deprived	23,585	19	11	8
5 Most Deprived	25,215	25	13	12
Total	122,501	74	41	33

Source: Argyll and Clyde Health Board Cytology Database

Death Trends

There have tended to be fewer deaths from cancer of the cervix in Argyll and Clyde women in recent years, particularly in 1993 and 1994 when the crude mortality rate was lower than the rate for Scotland as a whole (Figure 13). However, since the numbers involved are small and vary between years, they need to be interpreted with caution. Certainly, there is no room for complacency as there are still too many lives lost unnecessarily from this disease.

Conclusion

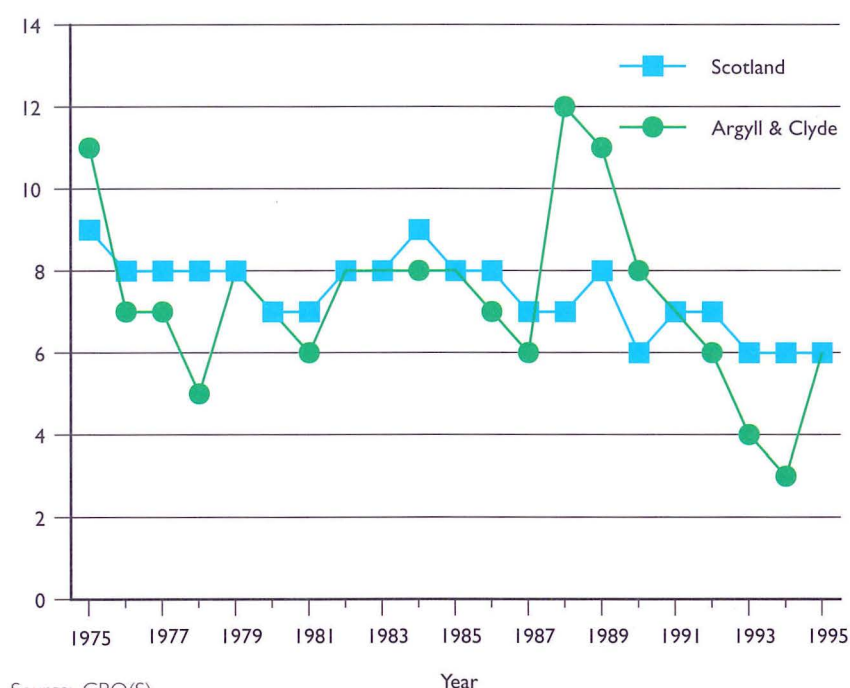
It is considered that the impact of the systematic screening programme is beginning to be seen. However, it is important to sustain, and indeed to aim to improve, both the current levels for screening coverage - particularly in the less affluent areas - and the various quality assurance processes which are integral to the programme as a whole.

Lewis Reay, Consultant in Public Health Medicine

Kathryn Whale, Information & Audit Support Officer

Figure 13

Time Trends for Death Rates for Cervical Cancer in Scotland and Argyll and Clyde, All Ages, 1975 - 1995



Source: GRO(S)

Priority Setting



Public resources are scarce and have to be allocated between competing services, such as health, education and housing. Resources allocated to health care in Scotland are then distributed between Health Boards which have the task of purchasing the required services from Trusts. Within the context of health care purchasing, it is increasingly recognised that some form of priority setting (or 'rationing') may become inevitable. NHS resources are finite, yet public expectations and pharmaceutical, technical and medical advances are ever-increasing. Consequently, choices have to be made, with the aim of targeting resources towards treatments which will maximise the potential health benefits to the whole population.

Priority Setting Mechanisms

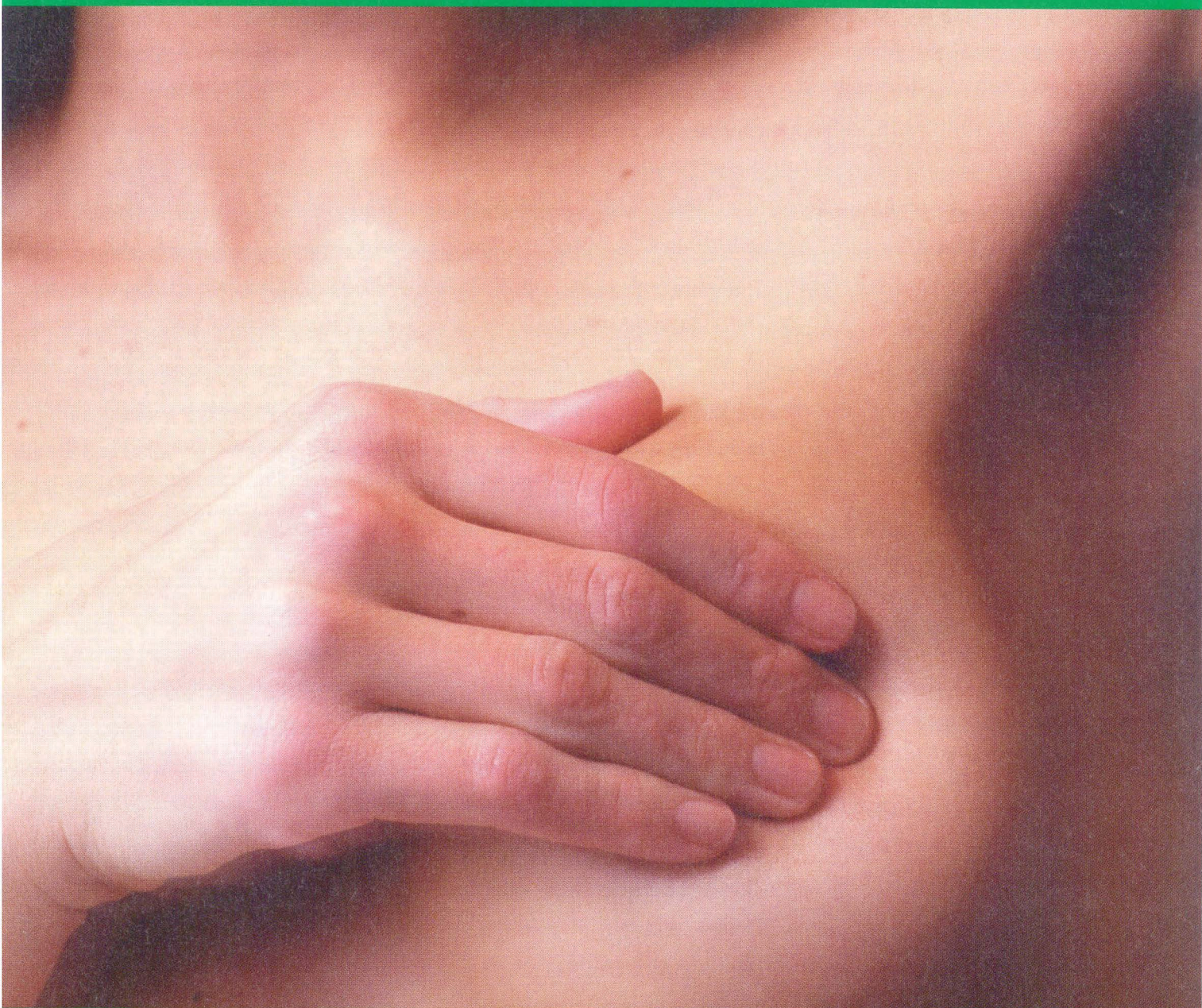
Two forms of prioritising have been present since the inception of the NHS nearly fifty years ago: implicit (for example, whether or not a general practitioner makes a referral to hospital; waiting lists

for non-emergency hospital treatment; and the non-availability of certain services) and explicit methods (for example, fixed budgets). Newer forms, such as GP fundholding and drives for increased efficiency, are now emerging.

Prioritisation is not just a dilemma for the UK, however.

Internationally, a wide range of approaches have been tried. In New Zealand, a Governmental advisory committee, which included health professionals, has developed a set of national guidelines for clinicians. In Sweden, a parliamentary commission has proposed some principles to guide priority setting which attempt to recognise the profound ethical implications. By contrast, in the 'Oregon Experiment' in USA the approach was highly democratic and direct. Members of the public were asked to rank various health care treatments in order of importance, and the results were subsequently used to exclude certain low priority treatments from public funding.

Cancer Services



Studies on Lipid-Lowering Drugs

Two major studies have recently examined the outcomes of treating high cholesterol levels with statin drugs to lower blood lipid levels; the Scandinavian Simvastatin Survival Group Study (4S Study) and the West of Scotland Coronary Prevention Study (WOSCOPS). Their findings have now been published, and are summarised below together with an assessment of the possible implications of applying the results to the Argyll and Clyde population:

4 S Study

The Scandinavian study demonstrated that the administration of statin drugs to men and women with coronary heart disease and raised cholesterol levels resulted in a one-third reduction in coronary mortality and morbidity (deaths and illness) over a five-year period. It is estimated that up to 19,000 men and women in Argyll and Clyde would be eligible for treatment with statin drugs according to the study criteria. If all of these individuals were treated, it is estimated that 130 coronary deaths would be prevented (or at least delayed for a number of years), at an annual cost of £10.8 million. The cost per coronary death prevented would be around £83,000.

Although not selected for inclusion in the 4S Study, certain other groups of people are also likely to be at higher risk of

coronary heart disease than the general population. These would be diabetics, individuals with a family history of heart disease, and middle-aged men who smoke and have high blood pressure. It is estimated that 3,500 individuals in Argyll and Clyde would fall into these groups. If they were also treated, there would be an additional annual cost of around £2 million, and approximately 24 coronary deaths would be prevented/delayed (also at a cost of £83,000 per death prevented).

WOSCOPS

The West of Scotland study indicated that a one-third reduction in coronary mortality and morbidity was possible by treating a lower risk group of middle-aged men with raised cholesterol but no known heart disease. Approximately 17,000 men in Argyll and Clyde would be eligible for treatment with statin drugs according to the WOSCOPS study criteria. If all these men were treated, it is estimated that 16 coronary deaths would be prevented/delayed, at an annual cost of £9.9 million. The cost per coronary death prevented would be around £620,000 - over seven times the corresponding figure for the 4S Study.

Conclusion

The above estimates for treating certain sectors of the population with lipid-lowering drugs do not include the costs of cholesterol testing which would be incurred initially. Also, they assume full compliance by general practitioners and patients; in practice, not all of the people identified would be likely to receive treatment.

However, it can be seen that if lipid-lowering drugs are to be prescribed, it is important to target those most at risk and likely to benefit from treatment, in order to be most cost-effective. These groups are people with known coronary heart disease (4S Study patients) and those with a family history of the disease, diabetics, and middle-aged men who smoke and have high blood pressure.

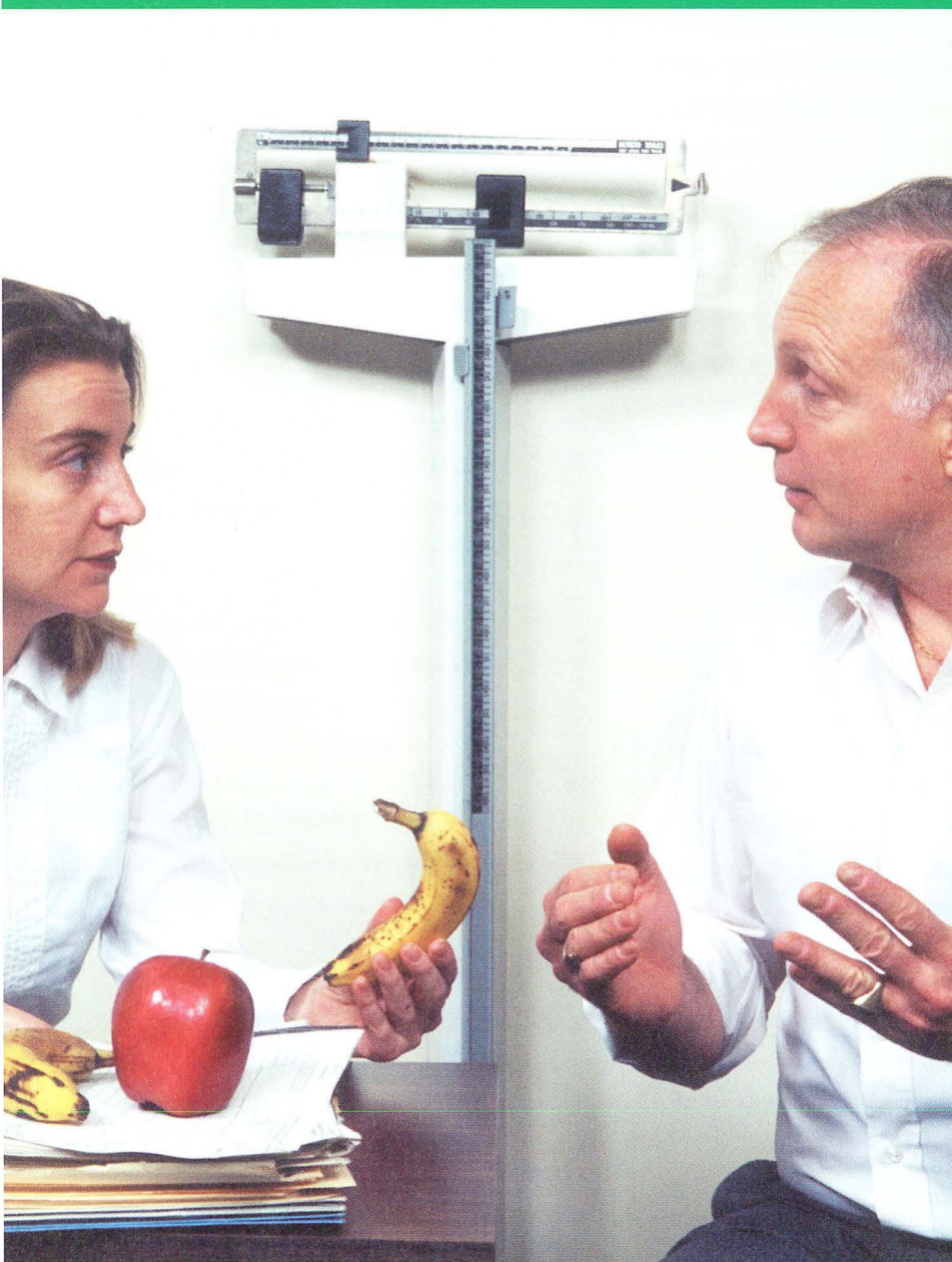
Argyll and Clyde Health Board is currently revising the clinical guidelines on cholesterol, and these studies will be taken into account.

Ann Lees, Health Economist

Tina Marr, Consultant in Public Health Medicine

Beth Rimmer, Medical Prescribing Adviser

Clinical Guidelines on Cholesterol



A high cholesterol (fat or lipid) level in the blood is one factor contributing to the development of coronary heart disease ('heart attacks'). Other important factors include a family history of the disease, smoking, diabetes and high blood pressure. Consequently, when assessing the risk of coronary heart disease for a particular patient, the doctor will consider all these other factors before deciding whether to test for high blood cholesterol.

Clinical guidelines for testing and treating high cholesterol levels were drawn up by Argyll and Clyde Health Board in 1994 and widely circulated to doctors in the area. At that time, a fairly simplistic approach was taken. The advice was to offer cholesterol testing to patients regarded as being at high risk of coronary heart disease, give lifestyle advice, and in certain circumstances offer treatment with drugs to lower cholesterol levels. It was recognised then that much research was being undertaken, and advice would need to be reviewed in the light of any new findings.

In Scotland, priority setting has been seen primarily as a local matter for each of the 15 Health Boards. Although there is no clear or effective methodology, an approach based on clinical guidelines seems to be emerging. Whilst the professional debate is undoubtedly intensifying, there has been as yet little effort to involve the general public in any meaningful way.

Although attempts have been made in various parts of the UK to develop scoring mechanisms to compare alternative ways of spending NHS money, the ideal methodology has not yet been developed. The relevant criteria for scoring alternatives may include:

- *measures of effectiveness and cost;*
- *the optimum balance between disease prevention and treatment;*
- *the number of people likely to benefit from treatment;*
- *equity considerations;*
- *national priorities for particular diseases or geographical areas, etc.;*
- *legal obligations;*
- *political or media concerns.*

Value judgements are inevitably involved in deciding which criteria should be used, what weights should be allocated to each and who should be involved in the process. These issues are all open to wider debate.

Within Argyll and Clyde, however, the requirement is for a methodology for priority setting which includes the following features:

- *involvement by both public and health professionals;*
- *a greater understanding of the media process;*
- *greater scrutiny of currently accepted treatments which may **not** be cost-effective.*

Examining Current Practice

In 1995, some form of 'service reduction' (actual or intentional) was included in the purchasing plans of two-thirds of all purchasing authorities in the UK. At present, any limitations in treatments available to residents of Argyll and Clyde Health Board have come into effect only after protocols have been agreed among the medical profession.

In order to raise awareness of the priority setting issues, and to

stimulate discussion within the Health Board, an internal seminar organised by the Department of Public Health was held in March 1996. A survey is currently being conducted to determine how other Scottish Health Boards are approaching the task of priority setting, including existing methods for public participation.

Information is being sought regarding current and planned restrictions in the services purchased, with particular reference to service developments and new drugs and technologies. The results should inform the priority setting debate and it is hoped that they will also be of value to each Health Board in developing local mechanisms which involve the public as well as health care professionals. Within Argyll and Clyde, a high priority is being given to seeking effective ways of involving communities in this important debate.

Ann Lees, Health Economist

Imogen Stephens, Registrar

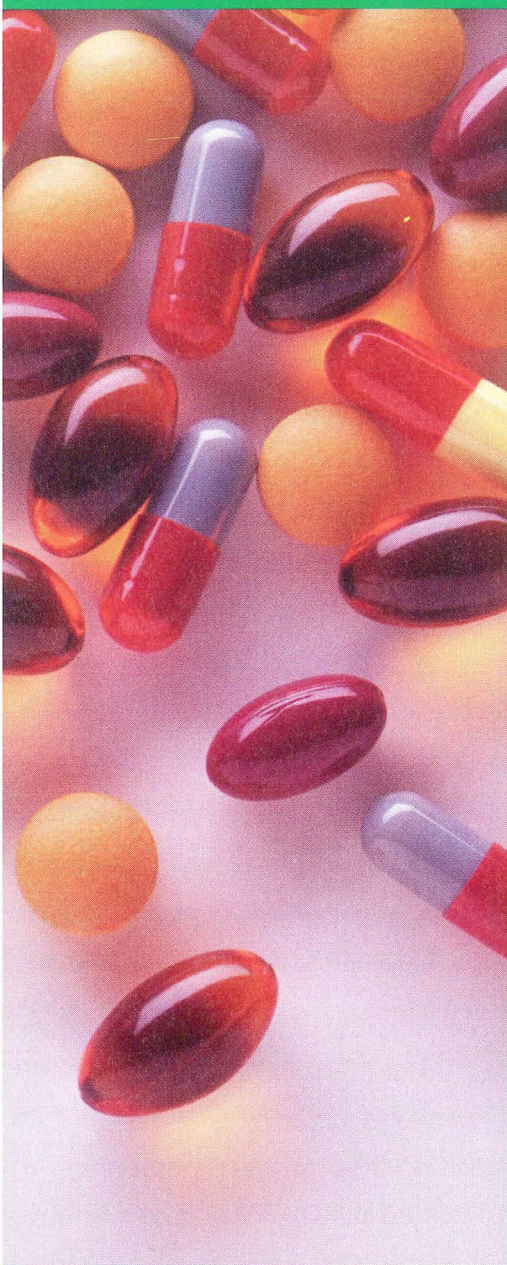
Since approximately one in three people develop cancer at some time in their life, cancer services are of prime importance. Cancer is one of the three national priorities identified by the Management Executive of the Scottish Health Service for action by Health Boards in 1996/97. Many services are involved in caring for those with cancer and their relatives: general practice for diagnosis, referral to specialists and continuing care; and many hospital specialties, including General Surgery, General Medicine, Gynaecology, Dermatology, Medical Oncology, Haematology and Palliative Medicine. Medical, nursing and laboratory services, and professions allied to medicine (for example radiology, radiotherapy, dietetics, speech therapy, physiotherapy and occupational therapy) work together to provide multi-disciplinary care. Prevention and early detection of cancer are important aspects which are being addressed by health promotion and screening programmes for breast and cervical cancer.

A needs assessment is being carried out on cancer services in Scotland by the Scottish Needs Assessment Programme. In Argyll and Clyde, a Cancer Steering Group and working groups for each of the major cancers have been set up. These involve representatives from each Hospital Trust, general practice and the Health Board. Plans will be developed over the next few years in collaboration with the other West of Scotland Health Boards, to ensure that all residents have access to the best available care.

One aspect of this work will be to gather and act on feedback from patients and their carers, in order to make cancer services as responsive to the needs of residents as possible. The outcome of care for people with cancer will be monitored. This will address not only the length of survival following treatment but also the quality of life of the patient.

Catriona Smith, Registrar

Pharmacy



Dispensing, Drug Costs and Waste

During the financial year 1995/96, nearly 4,682,000 prescriptions were dispensed by 95 pharmacies ('chemists') in Argyll and Clyde, at a cost of over £41.5 million. In addition, nearly 266,000 prescriptions were dispensed by 23 dispensing doctors (mainly in the remoter areas) at a cost of nearly £2.5 million. Taken together, these figures show that the average Argyll and Clyde resident received more than 11 prescriptions during the year, at a total cost of over £100 per person. It should be noted that these costs relate to the actual costs of the drugs to the Health Board, not to prescription charges. Only £2.8 million of the total £44 million was recouped by the Health Board in prescription charges during the year. Furthermore, the £44 million does not include the considerable cost of drugs used in hospitals each year.

There are obviously huge benefits to health from the development and increased range of drugs available in recent years. Many illnesses now have a better treatment outcome; for example peptic ulcers can now be treated using ulcer-healing drugs, whilst in previous decades major (and expensive) surgery might have been required. Another example is the use of newer medicines in psychiatry which enable some patients to live more normal lives in the community rather than in the confines of a hospital.

However, expenditure on medicines continues to be a major concern for the Health Board. It is one of the Board's largest costs, and is rising faster than the rate of inflation. There are a number of reasons for this. One is the introduction of newer, more effective medicines which replace older products, but are more expensive due to the recovery of research costs. Another reason is the increasing numbers of elderly people who require more medicines than younger age groups.

A further aspect of drug costs is the whole area of waste. If a full course of medication is not completed (for whatever reason), or if a larger quantity of a drug has been supplied than is required, the unused tablets, ointments etc. will be wasted and may even be dangerous, for example if they are accessible to young children. A national scheme for pharmacies to collect unwanted medicines from the public was set up in 1992. Within Argyll and Clyde, the results of a Local Health Council survey published in June 1995 showed that around three-quarters of the 450 respondents knew that their local chemist would provide this service. A considerable quantity of unwanted drugs is collected and safely incinerated each year; for example, 3.1 metric tonnes in 1995-96. While this is a valuable home safety exercise, it does reveal considerable waste which merits more in-depth investigation.

Patient Medication Records

The Health Board makes a small payment to pharmacists for holding details of patients' prescribed medication on computer. This is proving to be of great value, for example in checking for potential problems due to interactions between drugs before an additional drug is issued to a patient.

Self Medication

In addition to dispensing prescriptions, community pharmacies provide the facility for the public to buy medicines to treat themselves (self-medication). This is becoming increasingly important as people are encouraged to deal with minor ailments themselves. The 1995 Local Health Council survey showed that 55% of respondents had asked for advice from the pharmacist rather than the doctor, mainly because the complaint was minor or they did not want to bother the doctor.

Recent legislation has re-categorised some products from 'prescription only medicines' to 'pharmacy medicines' which can be sold under the supervision of a pharmacist. The Royal Pharmaceutical Society of Great Britain has established protocols for the sale of these products, and also requires counter assistants to have appropriate training.

The Health Board is required to ensure that the public has access to a pharmaceutical service, and it was gratifying that the Local Health Council survey showed that 97% of respondents were satisfied with their pharmacy service and that most felt that they had a pharmacy within easy reach of the doctor's surgery. However, just under half of the respondents felt that privacy was sometimes lacking in pharmacies, and with the developing advisory role of the pharmacist this is a matter which the pharmaceutical profession needs to address.

Sandy Shearlaw, Chief Administrative
Pharmaceutical Officer/Director of Supplies

Infectious Diseases



Notifiable Diseases

There is a statutory requirement that medical practitioners notify the Chief Administrative Medical Officer/Director of Public Health about patients with certain infectious diseases. The numbers of cases notified between 1991 and 1995 are shown in Table 7.

Some of these diseases and figures merit further comment:

Meningococcal Infection:

Meningococcal infection can cause meningitis and/or septicaemia (blood poisoning). There were 17 unlinked cases in Argyll and Clyde in 1995, giving a rate of 4 per 100,000 population, similar to Scotland as a whole. The number of statutory notifications of meningococcal infection for Scotland fell between 1994 and 1995, in contrast to England and Wales where there was a marked upsurge.

Measles, Mumps and Rubella:

Following the major epidemic of measles in 1994 and the implementation of the national measles, mumps and rubella (MMR) vaccination programme for schoolchildren thereafter, the numbers of cases of measles dropped dramatically in 1995. Only 151 cases were notified in Argyll and Clyde, and some of these may not in fact have been measles, as several viral illnesses mimic measles, and salivary testing of some cases demonstrated that the clinical diagnosis was wrong.

Table 7

Annual Numbers of Notifications of Infectious Diseases Argyll and Clyde Health Board, 1991 - 1995

Disease	No. of Notifications				
	1991	1992	1993	1994	1995
Bacillary dysentery	12	57	76	35	13
Chickenpox	3,672	2,282	3,926	2,718	2,771
Erysipelas	28	5	13	23	14
Food poisoning	169	125	174	240	634*
Legionellosis	1	-	-	1	1
Lyme disease	2	1	1	2	-
Malaria	3	-	4	8	2
Measles	214	150	202	783	151
Meningococcal infection	21	8	4	19	17
Mumps	61	57	36	61	30
Puerperal fever	-	-	-	1	-
Rubella	307	201	142	324	105
Scarlet fever	53	71	94	300	191
Tuberculosis (respiratory)	38	47	60	60	41
Tuberculosis (non-respiratory)	4	8	2	9	12
Viral hepatitis	13	13	6	12	17
Whooping cough	36	22	95	63	31

* Unlike previous years, the 1995 food poisoning numbers **include** campylobacter (387 cases).

Source: ISD (Forms ISD(D) 3 and 6)

Similarly, notifications of rubella and mumps in Argyll and Clyde fell to less than half the 1994 levels, lower than in any of the previous six years.

Tuberculosis (TB):

The number of cases of non-respiratory TB in Argyll and Clyde rose slightly to 12 in 1995.

However, there were fewer cases of respiratory TB in 1995 (41) than in 1994 (60). Of the four Local Government Districts, Renfrew had the highest number of cases of respiratory TB, with 33 in 1994 falling to 24 in 1995.

There has been no evidence of multiple antibiotic resistance in the samples taken from TB sufferers, a problem which is developing elsewhere. However, resistance to one of the antibiotics, Isoniazid, has been demonstrated in Renfrew District.

Viral Hepatitis:

Overall, the annual total of notified cases of viral hepatitis was consistent with previous years. One of the most common types, hepatitis A which is spread from

person to person through poor hygiene and food contaminated by infected food-handlers, rose slightly during the summer in Renfrew District. Hepatitis B and C, which are blood-borne, occurred mainly in people known to be at high risk (for example intravenous drug users).

Food Poisoning:

The number of reports of suspected food poisoning in Argyll and Clyde rose in 1995, reflecting a national trend. It is likely that some of the increase over previous years was due to increased reporting and testing of symptoms. However, it is also true that the number of notifications of food poisoning grossly underestimate the true toll of gastrointestinal infections acquired through food and water consumption. Amongst the cases confirmed by laboratory testing of stool samples in 1995, the most common infection was due to the bacterium campylobacter, with salmonella the second most common.

Outbreaks of Gastrointestinal Illness

There were two outbreaks of food poisoning associated with hotels in Argyll and Bute District. Unfortunately, due to the transient nature of hotel guests, no samples were obtained in either case and the causative organisms or source of the outbreaks could not be determined. A small outbreak of food poisoning also occurred among a party who ate at a restaurant in Renfrew District. It was likely to have been caused by the bacterium *Bacillus cereus*, most probably from a rice dish.

Outbreaks of viral gastroenteritis continued to cause problems in coach parties, and in hospital and community settings. One outbreak on the Isle of Colonsay was associated with the consumption of shellfish, but there was also evidence later of person-to-person spread. Small round structured virus is the likely culprit in most of these incidents.

Vaccination Uptake Rates for Children

Argyll and Clyde Health Board continues to have one of the highest vaccination rates in Scotland. Primary immunisation uptake rates at 24 months of age in 1995 all exceeded national targets: coverage was 99% for diphtheria, tetanus and polio; 98% for Hib (*Haemophilus influenzae B*); 97% for whooping cough (pertussis); and 96% for MMR (measles, mumps and rubella).

HIV and AIDS

Further cases of HIV infection and AIDS were recorded in 1995. However, the numbers of new cases of HIV infection and of AIDS were each still in single figures and relatively small compared with the major cities.

By 31 March 1996, Argyll and Clyde had a **cumulative** total of 62 cases of HIV infection and 24 of AIDS, of whom 19 were known to have died. Fifty-one of the HIV cases were males, with 31 of them

acquiring the infection from homosexual intercourse and six from heterosexual intercourse. A further five had acquired the infection from injecting drugs. Of the 11 infected women, three had acquired the infection from heterosexual intercourse and seven from injecting drugs.

Marianne Vinson, Consultant in Public Health Medicine

Staff List

Miss Sylvia Brown

Receptionist/Typist

Dr John Bryden

Locum Consultant in Public Health Medicine
(Part-Time) (HIV/AIDS and Special Projects)

Dr Catherine Chiang

Registrar (Part-Time)

Ms Anne Clarke

Health Promotion Unit Manager

Mr Phil Eaglesham

HIV/AIDS Counselling Co-ordinator

Ms Gail Gilchrist

Drugs Development Officer

Dr Christian Gunneberg

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(Health Status and Primary Care)

Mrs Marilyn Honan

ECR Officer

Dr Alister Hooke

Alcohol Development Officer

Mrs Shona Hynds

Personal Assistant to Mrs Marrant

Mrs Ann Johnston

Personal Assistant to Dr Wilkie

Mrs Paula Kydd

Higher Clerical Officer

Ms Ann Lees

Health Economist

Mr Pat Lochery

Emergency Planning Officer

Mrs Irene Maclean

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Dr Tina Marr

Deputy Director of Public Health
Consultant in Public Health Medicine
(Acute Services)

Mrs Ailsa Marrant

Director of Dental Public Health

Mrs Jeanette Morrison

Personal Secretary to Dr Vinson and Dr Bryden

Mrs Janine Muir

General Administrative Assistant

Mr Andrew Noble

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Mrs Barbara Parrish

Personal Secretary to Dr Scott and Dr Smith

Mrs Margaret Perry

General Administrative Assistant

Miss Fiona Quinn

Clerical Officer/Typist

Mrs Irene Raine

Support Services Manager

Dr Lewis Reay

Consultant in Public Health Medicine
(Population Programmes)

Miss Donna Reid

Personal Secretary to Dr Marr and Mrs Raine

Ms Ellen Saunders

Personal Secretary to Dr Reay and
Dr Gunneberg

Dr Sheila Scott

Consultant in Public Health Medicine
(Elderly & Young Physically Disabled)
Seconded as Director of Acute Strategy
from April 1996

Dr David Sloan

Consultant in Public Health Medicine
(until February 1996)
(Communicable Disease and Environmental
Health)

Dr Catriona Smith

Registrar

Dr Helen Smith

Consultant in Public Health Medicine
(Mental Health, Dementia, Drugs and Alcohol)

Dr Imogen Stephens

Registrar

Mr Patrick Sweeney

Senior Registrar in Dental Public Health

Dr Marianne Vinson

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Consultant in Public Health Medicine
(Communicable Disease/Environmental Health/
Emergency Planning)

Dr Lesley Wilkie

Director of Public Health

Argyll and Clyde Health Board Area and New Council Areas (From April 1996)

