Kingston Local History Society event on 25 May 2017

Gavin Smart attended on behalf of South Western Ambulance NHS Foundation Trust (SWASFT) to explain the evolution of the UK ambulance service, with particular reference to Devon and, in part, what the public can do to reduce unnecessary use of NHS services. Gavin is a volunteer fully trained 'First Responder' for SWAST, whose role is to 'fill the gap' between receipt of a 999 call and the arrival of an ambulance. He is also part of the PR team, attending large and small events. Prior to joining the service, he had been a youth worker, including running his own business until he got fed up with running across Dartmoor, shouting "Wait for me!" Despite IT difficulties caused by the recent cyber-attack on the NHS, Gavin had prepared a very informative presentation, including interesting statistics, facts and images. He pointed out that the misconception by children that ambulances make a 'Nee Naw' sound has been created by the older generation. Ambulances now use a 'Wailer'. Later in his presentation, he explained the more relevant impact of an ageing population on hospital and ambulance services.

The modern ambulance service, evolved relatively recently. The Roman armies had a doctor attached to each cohort (*often a Moor)* who could stitch, amputate and treat soldiers but had no means to get them to a surgeon. The first formal system of a central treatment point was established by the Spanish in 1487 at the siege of Malaga, involving a group of citizens using improvised litters to transfer the wounded to a central point for treatment by monks. Later, Dominique Jean Larrey, Surgeon General in Napoleon's army introduced a very basic ambulance to the battlefield, where the wounded could be triaged, given immediate treatment and then moved to an appropriate facility. It was around 150 years before this was to become accepted practice. In the UK, the basis of the modern service was the establishment of the Hospital Carriage Fund, which provided carriages to transport victims of smallpox and other infectious diseases to a central point. The victims had to pay the cost of hire of the horses. This was the pattern for many years until the establishment of St John's Ambulance Service in 1887, which provided transport for the masses when the still extant Hospital Carriage Fund changed its role to the provision of wheelchairs. In 1897, the Metropolitan Asylum Board established 11 ambulance stations to cover the whole of London. They operated with purpose-built horse drawn ambulances, which could carry two patients and an attendant. These were not for treatment but for transport, often to the Work House, where people would work off their debt. 1904 saw the first steam powered ambulances - a major development, as they could travel at 15 miles per hour, albeit transporting only one patient at a time. The Great War saw the use of these ambulances and motorised ambulances replaced the steam model.

The Great War (*and subsequent conflicts*) saw major moves forward in technology and care, also affecting attitudes towards women, who joined the First Aid Nursing Yeomanry (FANYs) and faced prejudice from staid army attitudes. The London Ambulance Service was staffed entirely by women in 1917 because of the loss of men in the conflict and the war time roles of women may have supported extension of the right to vote. The value of the FANYs' contribution to the war was recognised when they were advised that they needed to salute officers only once a day. The Red Cross provided 2171 staffed ambulances, which were initially canvas sided and remained so until the 1950s. The rationale for this was that a bullet would pass straight through canvas and shells would not explode, avoiding the ricochet effect and splinters caused when metal was hit. These vehicles had up to 6 stretchers but were still used purely for transport. The second world war established the process of immediate treatment at the scene of injury, with each soldier issued with a bandage pack in his uniform pocket and developments from military conflicts continue to be used by Ambulance Services today, including techniques developed in Afghanistan. These include dressings with integrated clotting agents and new types of tourniquets, which were once

banned. Today's services are based on highly professional levels of training and to be called "just an ambulance driver" is taken as an insult. Paramedic staff have full technical training so that they can give immediate treatment 'at scene', including tests and administration of drugs, leading to much better chances of saving lives. For example, in case of a heart attack, the paramedic can take a heart trace and send this to the Cardiac Laboratory by electronic means; this allows the patient to receive a stent immediately on arrival at Hospital, bypassing an A&E wait. The aim for the administration of clot busting drugs for strokes is now to achieve this within 2 hours.

The Local Government Act of 1929 included the transfer of civilian ambulance services to Local Authorities. These were small organisations, including the Devon County Ambulance Service.

The Devon County Ambulance Service was set up in 1930 under the 1929 Act together with separate Ambulance Services for Exeter, Torbay and Plymouth. A notable and influential character in the development of Devon County Ambulance Service after WW2 was Bob Selly. He was Chief Ambulance Officer from 1960 to 1965 and was the last known survivor of the Arctic convoys to Russia. As part of 385 Naval Air Squadron he flew Fairy Swordfish aircraft, affectionately known as 'Stringbags' which were already obsolete at the beginning of the war.

He was succeeded in due course by Laurie Caple in 1973, who managed transformation of the Devon service from Local Authority management to Area Health Authority control and it was at this point that the Ambulance Service first became an integrated part of the National Health Service. This also lead to more professionalism and the purchase of new vehicles, which carried the first blue lights in the UK. In the national reorganisation process, Laurie applied for several CAO roles, but Devon was not his first choice and he made clear at interview that, if appointed, he would replace volunteers with clinically trained professionals, assuming that this would not be acceptable. It was and he was appointed! Laurie managed the complex amalgamation of the four current services or Devon County, City of Plymouth, City of Exeter and County Borough of Torbay Ambulance Services into a single organisation, including cultural and attitudinal change, which met considerable resistance. Two incidents supported his determination to professionalise the service: the first was the arrival of an ambulance at a hospital in Exeter, containing a distraught young woman with her still-born baby, attended solely by an 11-year-old cadet; and the second was seeing an ambulance driver helping his attendant out of the vehicle in Tavistock – one of them was 72 and the other 85. However, many volunteers transferred to the Hospital Car Service, which continues today. The service at that time had three 24/7 control centres in Exeter, Torbay and Plymouth and three control centres in rural areas which operated office hours only. Out of office hours, ambulances were despatched from the duty officer's home or even from his bedside. In 1974, once a vehicle had been sent out, the crew was on its own as there was no radio system in place for these rural areas. Crews were required to route themselves via set village control points where a mechanical system would show a red/green flag – if a red flag showed, they then had to locate the nearest telephone box and call back to the control centre, if green, they could continue. In 1977, the Queen visited Exeter by water as part of her Silver Jubilee. As she disembarked from the river boat, there was a complete breakdown of the ambulance radio system in Devon. As a consequence, Laurie was authorised to introduce the Motorola system he had pioneered in his previous role in Norfolk and by 1979 Devon had become one of the best served areas in England with 97% radio coverage based on the use of existing BBC and ITV radio masts.

In 1994, Devon Ambulance Service merged with Cornwall and Somerset to become West Country Ambulance Service.

Over time from 1974, the vehicles used developed from the early Humbers and Bedford P1s, which were renown for inducing car sickness, through Ford Transits and Bedord CFs,

the latter having an unfortunate fault, leading to the front wheels falling off. Sliding doors were provided to avoid the common risk of an open door being knocked off by other traffic. Gavin explained that travel in the back of an ambulance continues to induce nausea in some people.

In 2006, Dorset Ambulance Service joined with West Country Ambulance Service and the current Southwestern Ambulance Service was formed.

In 2013, SWAST and Great Western Ambulance Service amalgamated making an addition of the counties of Avon, BANES, Gloucestershire and Wiltshire, now covering one fifth of mainland England.

Gavin provided the following interesting statistics:-

SWAST

1. Serves 5.3 million residents, which number increases with an additional 17.5 million in the summer months. Luckily for the Service, they do not all come at once.
2. Covers huge rural areas and large cities.
3. Has an annual budget of £226 million.
4. Employs 4,500 people, with an ongoing recruitment drive.
5. Has 3,200 trained volunteers manning the Community First Responder process; volunteer drivers for the Hospital Car Service.
6. Can take on contracts for other related work.
7. Handled 1 million 999 calls in 2015/16 (2495 per day) and is experiencing this number increasing year on year.
8. Has its HQ in Exeter, Clinical Control hubs in Exeter and Bristol (deploying and tracking all vehicles), and Ringwood (for the 111 service only).
9. Has 96 ambulance stations and 2 Hazardous Response Teams (with specialist skills gained from training on ships, prisons and other hazardous locations). They also act as back up for the Police in armed response incidents.
10. Use of 6 Air Ambulances, controlled and clinically staffed by SWAST with helicopters and pilots provided by the Air Ambulance charities.
11. Ambulances, Rapid Response Vehicles; Patient Transport vehicles; a boat (Scilly Isles); bicycles; three motor cycle teams (which carry a mini pack of what a standard ambulance carries); and helicopters.
12. Is reducing the number of single manned Rapid Response Vehicles to provide more 'two man' ambulances.
13. Has crews active throughout their shifts where in the past they may have been sitting in ambulance stations awaiting a call out.
14. Has to balance government targets on time (8 minutes) to convey to A&E and the service objective of patient care.
15. Has adopted a new initiative to reduce the need to take people to A&E and this has led to SWAST's being the best performing Ambulance Trust in England. The current "Right Care, Right Place, Right Time" approach allows for different treatment 'pathways':-

i. Treat patient and leave safe at home.

ii. Refer patient to GP or Out of Hours service.

iii. Home nursing.

iv. Emergency Care Practitioner treatment.

v. Referral to specialist service.

vi. Calling a relative for assistance.

16. 13% of calls are successfully dealt with by telephone 'hear and treat'; 35% patients are seen and treated at home; and 44% are taken to hospital. There is an advisory chart of services, Choose Well, available to the public to prevent abuse and relieve pressure of the 999 and A&E system

In answer to questions, Gavin answered that:

The Trust works very successfully with St Johns in a number of areas, particularly at public events. They are now very professional in their approach with excellent training, equipment and vehicles. They now work on a strong business model and SWAST has a 'memorandum of understanding' with St John's Ambulance which enables them to provide a number services such as Community First Responders and transport of patients on our behalf.

The 111-telephone service is answered mostly by non-clinical staff. A call adviser, backed up by paramedics and nurses, is guided by a computerised system. It had initial problems at start-up, but the service now works very well, albeit that only one error can make national headlines.

The increasing needs of the elderly are a major cause of 'blockages' in the health care system. Bed-blocking due to the shortage of appropriate community care places means that there is often a shortage of available hospital beds.

The ambulance service remains responsible for a patient taken to hospital until (s)he she has been formally handed over to hospital staff. This can lead to ambulances being unavailable for periods, sometimes with several vehicles waiting outside A&E. There are now incentives in place for hospitals to reduce the number of occasions where ambulance crews experience delayed hand-overs. Trials have taken place where one paramedic based in A&E can take responsibility for a number patients until the hand-over process is complete leaving ambulance crews free to become available once more.