Microchips in South Australia - after all the pain there can be gain

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BACKGROUND

History

The microchip industry has been fraught with problems. There have been numerous technologies and a lack of a decent scanner network, chips undetected by scanners - as the wrong type was all that was available - and animals subsequently euthanased. The companies themselves have been involved in protracted legal battles overseas which undermined everyone's confidence as well as what has been said by various companies within Australia about each other. The ISO (International Standards Organisation) came down with a standard in 1994 which was extended to all animals in 1996, and again it was a somewhat controversial decision as seems to haunt this industry. All of this has led to a lack of confidence in the industry from veterinarians, welfare groups and councils around the country - the cornerstones of UAM. The ISO decision also allowed for full or half duplex, which added further confusion to the already complicated debate. NSW then came down with a brave new plan using microchips as its registration and identification and this led to Australia following the ISO path as its likely future. Again this was controversial as witnessed on a *7.30 Report* program earlier this year.

Questions we needed to ask ourselves

- Who are the main beneficiaries of microchips?
  Primarily owners.
- What can microchips do for us?
  They can provide a permanent 24-hours a day link to their owner by having a unique unchangeable number implanted into the pets. This can help UAM with returning animals to their owner, contacting the owner of a lost, injured or dead animal, prove it is the owner's dog when involved in an offence and has the potential to replace the existing disc registration system
- Is the technology appropriate and good enough?
  Yes.
- Can we ensure they are reliable?
  This question takes a bit more to answer and there will be some failure rates in anything that is so small. This requires monitoring.
- What do we need to do to ensure the system works?
  This is why I'm here today.
- When these have been answered the next is "Do we even want microchips?"
  "Yes."

The essential *'Trilogy'*

There are three main parts to microchips and each is vitally dependent on the other two for any hope of them being at all useful. The Trilogy consists of the microchips themselves, the scanners *and* the registry. If any part of this trilogy is not working effectively then they are all useless, therefore the trilogy needs integrity. This is a critical factor to be aware of and each part needs full attention in any policy on microchips. To decide to embark on microchips in any way is to embark on the trilogy.

HOW TO ESTABLISH *THE TRILOGY*

Network of scanners

Before a microchip can be read we need scanners. To this end before any microchip system can work we need a network of scanners. These scanners need to be available throughout a state at sites which could reasonably be expected to be receptacles for lost, stray or unowned animals, as well as those that are involved in the collection or treatment of injured animals and those that implant chips. The large number of scanners required for a decent network gives us the opportunity to put it out to tender for a company to fill the order and make considerable savings on such a bulk purchase. The scanners need to be multi-readers, remember we are protecting the users.

Obligation to use scanners

The next step is to establish systems that oblige the scanners to be used by all welfare groups, councils and veterinarians on all animals that are presented as lost, stray or unknown owner *and* all those prior to being implanted. This can be via a code of practice or legislation/regulation. If some places are not using the scanners then again the system will break down. For the scanners to be used properly is also very important and therefore the users must be trained. Breakdowns in these areas make the entire system fail.

STANDARDS

Here is where it becomes important to establish our standards. These standards need to apply to all three facets of the trilogy. We need standards for the scanners, the microchips themselves and the registry. As well we need to have controls on the microchip centres that implant the transponders and this can be done through the registry. So it becomes a four-way system and the standards could well be referred to as System Standards. If standards are not made or met then again the whole system becomes useless at worst and in the least denigrated severely.

An independent assessor

It is important to have an ability to test the equipment being used to ensure it meets the established standards. This testing is related to the magnetic and electric fields put out by the scanners and the energised implants. It is complex and requires people trained in the scientific field of radio frequency emissions. It is important that they are independent and remain so, they must report to the Board (in SA) in writing the results of all tests completed for the purposes of becoming a validated chip or scanner within SA. The Dog and Cat Management Board must also report the results to the relevant groups within the industry.

Maintain standards

How do we maintain standards? For them to work we must have some control over what is happening and with the constitutional laws governing free trade between States we can only have control over the use of a product and not its sale. If a company wishes to sell its product in South Australia then they need to pass our standards, they submit their product to our independent assessor for testing and a written report of that testing is submitted to the Dog and Cat Management Board. Those that pass can be freely published and those that fail need to be passed onto relevant bodies within the industry. We believe that if all microchip implant centres are notified they will not want to use an inferior scanner as it will put them at risk of making an error. The only way we believe we can control the use of the unsatisfactory implant products is to not allow them to be registered. All these areas can only be effectively controlled by control over the registry. This means we need:

- *A South Australian registry*
  To have a South Australian registry does not mean starting from scratch. This function can be performed by any of the current registries that have the capacity to divide their databases into parallel groups of which South Australia would be one and provide all the necessary security and are able to perform to the standards set by the Board.

- *Encourage use of microchip ID*
  In the early stages we feel that microchip ID should be voluntary rather than compulsory. But just saying it alone will not be enough. There needs to be some form of stimulus to get people involved with having their pets identified. Encouragement could include compulsion but we feel we should try voluntary first. It could be the only legally recognised form of identification or, we can do an extensive advertising campaign and/or introduction of a graded registration system that rewards owners of identified animals with a reduced fee. The latter would benefit all levels of urban animal management.

WHERE ARE WE IN SOUTH AUSTRALIA NOW?

Scanner network

We hope by now to have established our scanner network. This is the biggest and most expensive step in the process, but now this is established, we can move forward to our next steps. The tender documents for the South Australia registry should also be drawn up by now and a training program for the scanner use should be underway.

The responsibility to use them is also underway. We have determined our independent assessor for the products and testing has already been carried out on some items.

Registry standards

There must be security of data, but this does not exclude those that need access to the data. There must be 24 hour access for all those that are likely to need it, being councils, veterinarians and animal welfare agencies. Owners may be able to access their own details for purposes of change of address or telephone numbers but nothing more. There must also be backups made of the data and stored in fireproof protection off the premises. Basically these are Domestic Animal Registry requirements.

Implants standards

These must be encased in a material inert to the body and its' defence mechanisms. There must be a failure rate of less than 0.1% (1 in a thousand). They must be able to be read by a defined scanner field strength at a scan speed of 0.5m/sec at a minimum distance of 5cm. They will in the future be FDX-B chips - ie. full duplex ISO standard 11785 chips. Only those passing the standards will be able to be recorded on the registry, the registry is the control.

Accredited microchip centres

Only those centres accredited with the SA Dog and Cat Management Board will be permitted to register chips on the database. To become an accredited centre the same criteria as those used by the AVA for their accreditation will need to be met. These groups will be responsible for *all* microchips implanted in South Australia in the future and the registry will exert the control. No unaccredited implanter will be able to register microchips on the South Australian registry. This group is also responsible for failure reporting, essential to any effective system.

SUMMARY

There is a trilogy of scanners, implants *and* registry whether we like it or not and *all* three components must be addressed in any microchip policy. We need to protect those responsible consumers that have already had their pets implanted. We need standards to prevent poor quality products not providing the security that this technology can offer. These standards need to include all parts of the trilogy. The standards need monitoring and failures need to be investigated.

WHERE TO NOW?

Steady progress along the path we have chosen, but we must not stop monitoring what is happening around us, modifying our planning accordingly. To be stubborn to the exclusion of new or better ideas is something we must avoid. Another aim is to start now to encourage other States to also take the steps towards an equitable functional microchip system and develop a true national approach. The first step in this process may even be to start with something more likely to be agreed upon, such as a national register for dangerous dogs. Finally, next year in Melbourne we hope to be able to give you an update on where we have got to and the 'success' we have achieved.

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Ian is a veterinary surgeon who graduated from Murdoch University in 1981 and is now in private practice in northern Adelaide suburbs dealing mainly with dogs and cats. His interest in animal behaviour and management has developed over many years. He was the Convenor of the 1997 Urban Animal Management Conference held in Adelaide. Board member of the Dog and Cat Management Board 1995-1998.