



13 February 2013

Committee Secretary  
Senate Finance and Public Administration Committee  
PO Box 6100  
Parliament House  
CANBERRA ACT 2600

Dear Committee Secretary

**Inquiry into the Progress in the Implementation of the Recommendations of the 1999 Joint Expert Technical Advisory Committee on Antibiotic Resistance**

The Consumers Health Forum of Australia (CHF) welcomes the opportunity to provide a submission to the Senate Finance and Public Administration Committee's *Inquiry into the Progress in the Implementation of the Recommendations of the 1999 Joint Expert Technical Advisory Committee on Antibiotic Resistance*.

CHF is the national peak body representing the interests of Australian healthcare consumers. CHF works to achieve safe, quality, timely healthcare for all Australians, supported by accessible health information and systems.

CHF welcomes the initiation of this Inquiry and the renewal of interest in this issue. Our submission calls for a renewed, fully coordinated resistance management plan for human antibiotics. We have also called for stronger public health campaigns, such as those recently initiated by NPS MedicineWise, to change community perceptions of antibiotics in line with JETACAR recommendation 19.

Finally, CHF notes that Australians are among the highest users of antibiotics in the developed world, with high levels of unnecessary prescribing. In light of the scale of antibiotic misuse, as well as the costs and impacts of antimicrobial resistance, CHF calls for the full and immediate implementation of all of the JETACAR recommendations.

CHF appreciates the opportunity to provide a submission to the Inquiry. Should you wish to discuss these comments in more detail, please contact CHF Policy Manager

Yours sincerely,

**Carol Bennett**  
**CHIEF EXECUTIVE OFFICER**



**Submission to the Senate Standing Committee on Finance and Public  
Administration's *Inquiry into the Progress in the Implementation of the  
Recommendations of the 1999 Joint Expert Technical Advisory  
Committee on Antibiotic Resistance***

**February 2013**

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Recommendations of the 1999 Joint Expert Technical Advisory Committee on  
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## **Introduction**

The Consumers Health Forum of Australia (CHF) welcomes the opportunity to provide input into the Senate Standing Committee on Finance and Public Administration's (the Committee) *Inquiry into the Progress in the Implementation of the Recommendations of the 1999 Joint Expert Technical Advisory Committee on Antibiotic Resistance* (JETACAR) (the Inquiry).

CHF is the national peak body representing the interests of Australian healthcare consumers. CHF works to achieve safe, quality, timely healthcare for all Australians, supported by accessible health information and systems.

In the fourteen years since JETACAR handed down its report, many initiatives have aimed to address the issues that it raised. In recent years, however, there has been inaction on many of JETACAR's recommendations at the government level. CHF welcomes this Inquiry and the renewal of interest in this issue.

CHF's submission draws on consultation with our membership, which includes organisations advocating for older consumers, disease specific groups and networks, state and territory peak consumer organisations and individual consumers. In particular, we have drawn on consumer feedback, research and literature scoping undertaken through dedicated consultations on antibiotics and antimicrobial resistance conducted in 2011-12.

CHF has addressed the following aspects of the Inquiry's terms of reference:

- a. Examination of steps taken, their timeliness and effectiveness;
- b. Where and why failures have occurred; and
- c. Implications of antimicrobial resistance on public health and the environment.

While we support the full implementation of all JETACAR recommendations, CHF's submission focuses on the clinical use of antibiotics. In particular, our focus is on ensuring the full implementation of JETACAR's recommendations relating to communication, education, and research and development for new antibiotics.

## Examination of the Steps Taken, Timeliness and Effectiveness

The establishment of the JETACAR in 1998 represented the first significant effort to explore and address antimicrobial resistance at the national level. JETACAR assessed the evidence for a link between antibiotic use in animals, explored the emergence of antibiotic resistant bacteria in humans, and developed recommendations to combat antimicrobial resistance.<sup>1</sup>

The recommendations of JETACAR were handed down in 1999, and many were focused on managing antibiotic use in agricultural and veterinary settings. While we support the full implementation of all the JETACAR recommendations, three are of particular interest to CHF:

- Recommendation 18, to recognise antibiotic resistance as a research priority
- Recommendation 19, to educate the public about the correct use of antibiotics
- Recommendation 22, to develop a fully coordinated resistance management plan for human antibiotics.

Much has been done to advance recommendation 18, and research into antimicrobial resistance itself has largely been recognised as a priority. CHF considers that the next step in addressing this recommendation is encouraging research and development in new antibiotics.

It was recently estimated that major pharmaceutical companies allocate less than two percent of their overall investments into antibiotics research, and it has been decades since a new class of antibiotics has been developed.<sup>2</sup> This may stem from the time-limited use of antibiotics, making them less profitable than so-called ‘lifestyle’ drugs that are taken on an ongoing basis.

CHF’s research and consumer consultations also suggest that there is widespread confusion about the efficacy of antibiotics in the treatment of viral and bacterial infections.<sup>3</sup> Although NPS MedicineWise has recently initiated promising campaigns in this area, CHF believes that the government’s response to recommendation 19 could be strengthened.

Finally, CHF believes that efforts to address antimicrobial resistance in the last decade have lacked coordination and national leadership. A renewed focus on the implementation of recommendation 22, and the development of a national plan to address antimicrobial resistance, would provide the best vehicle to pursue all of the outstanding issues raised by JETACAR.

**CHF calls for a renewed, fully coordinated resistance management plan for human antibiotics in line with the JETACAR recommendation. The plan should explore research and development incentives for the development of new antibiotics, as well strategies to educate consumers on appropriate antibiotic use.**

<sup>1</sup> Department of Health and Ageing (2000) *The Commonwealth Government Response to the Report of the Joint Expert Technical Advisory Committee on Antibiotic Resistance*. Department of Health and Ageing: Canberra.

<sup>2</sup> Hiramatsu, K., Igarashi, M., Morimoto, Y., Baba, T., Umekita, M. and Akamatsu, Y. (2012) ‘Curing Bacteria of Antibiotic Resistance: Reverse Antibiotics, A Novel Class of Antibiotics in Nature.’ *International Journal of Antimicrobial Agents*. 39(6): 478–485.

<sup>3</sup> CHF (2012) *Community Quality Use of Medicines and Diagnostics Project: Consumer and General Practice Use of Antibiotics Report*. CHF: Canberra.

## Where and Why Failures Have Occurred?

Much of the research attributes inappropriate prescribing to the treatment of upper respiratory tract infections, such as colds and flus, in primary care settings.<sup>4</sup> CHF's own research in this area suggests that this practice is aimed at reassuring consumers that their condition is being treated,<sup>5</sup> and that this practice is a major contributor to antimicrobial resistance. CHF also notes that antimicrobial resistance has been compounded by the deceleration of antibiotic development. As existing antibiotic agents are becoming less effective, the development of new antibiotics has slowed, with no new classes of antibiotics having been discovered in the last twenty to thirty years.<sup>6</sup>

CHF's consumer consultations on this issue suggest that consumer demand for antibiotics is also a major contributor to antimicrobial resistance. This demand is driven by a number of factors, including the belief that antibiotics will hasten recovery, the need for reassurance in the treatment of a condition, and issues around the cost and availability of medicines.

### *The need to hasten recovery*

Many consumers believe that antibiotics drive a faster recovery than immune responses, and are often unaware that they have little impact on the duration of an illness and no impact on its symptoms.<sup>7</sup> CHF therefore considers that there is a role for the prescribing doctor in informing the consumer that they may still feel unwell in the short-term, and that improvements in their condition are more likely to come as a result of the illness running its course.

### *The need for reassurance*

CHF's consultations suggest that consumers with upper respiratory tract infections, particularly parents of children with these infections, may go to the doctor seeking reassurance.<sup>8</sup> In turn, they may be given a prescription because it allows the doctor to satisfy the consumer that something is being done. Given the inadequacy of antibiotics in treating such infections, CHF would welcome the deployment of other strategies to provide consumers with reassurance, such as:

- Explaining the course of the illness, what to expect, and how long it is likely to last
- Providing the parent with active steps for managing symptoms, such as rest
- Recommending over-the-counter medicines for symptom management.

### *Cost and availability*

The low cost and availability of antibiotics has also been cited as a major contributing factor to antimicrobial resistance. Antibiotics subsidised through the Pharmaceutical Benefits Scheme are accessible and affordable for consumers, and while this is largely positive, it has resulted in higher relative costs for over-the-counter medicines for symptom management.

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<sup>4</sup> Faber, M.S., Heckenback, K., Velasco, E. and Eckmanns, T. (2010) 'Antibiotics for the Common Cold: Expectations of Germany's General Population.' *Eurosurveillance*. 15(35): 10-17.

<sup>5</sup> CHF Op cit.

<sup>6</sup> Tapsall, J. and Merino, J. (2007) 'Towards an Integrated Approach to the Problem of Antimicrobial Resistance in Australia.' *Microbiology Australia*. 28(4): 152-153.

<sup>7</sup> CHF Op cit.

<sup>8</sup> Ibid.

*Time scarcity*

Work and family pressures featured strongly in CHF's consultations as factors contributing to consumer demand for antibiotics.<sup>9</sup> Many consumers feel pressured to return to work, return their child to school or maintain wellness to meet a variety of other demands.

*Anecdotes, personal experience and word of mouth*

Consumer demand for antibiotics is also thought to arise as a result of lived experience, or perceptions of lived experiences. Consumers who have been prescribed antibiotics in past have told CHF that they are likely to attribute the improvement of their condition to their use of antibiotics.<sup>10</sup> Consumers may also infer from past experience that particular symptoms require antibiotics for treatment, when they often represent signs of improvement.

These issues, and many others identified through CHF's consultations, stem from consumer perceptions and expectations. CHF believes that stronger public health campaigns, such as those recently initiated by NPS MedicineWise, could contribute to changing these perceptions in line with JETACAR recommendation 19. These campaigns should be subject to regular evaluation to ensure they are achieving the desired results.

**CHF calls for stronger public health campaigns with the aim of changing the perceptions that lead to requests for antibiotic prescriptions. These should feature a stronger focus on symptom management through medicines for pain and decongestion, and be subject to regular evaluation. CHF also considers that there is a role for prescribing doctors in discussing the lack of efficacy of antibiotics in treating viral and bacterial infections.**

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<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

## Implications of Antimicrobial Resistance on Public Health and the Environment

Australians are among the highest users of antibiotics in the developed world. Over twenty million prescriptions for antibiotics are dispensed in Australia each year, more than double the rate of many comparable OECD nations.<sup>11</sup> The significance of this issue, and its impact on health consumers, was recently recognised by the Australian Commission on Safety and Quality in Health Care:

*Up to 50 percent of antimicrobial courses prescribed in Australian hospitals are considered inappropriate. Unnecessary and inappropriate use of antimicrobials costs lives. It drives the development of pathogens resistant to antibiotics and other antimicrobials and poses the real risk that health professionals and health consumers will face a future with few effective antimicrobials. It also adds to the cost of health care.*<sup>12</sup>

The reduction in effectiveness of antibiotics is increasingly being recognised as a consequence of antibiotic misuse. Australian research suggests that antibiotics are often unnecessarily prescribed for viral infections, for which antibiotics have no effect, or for simple bacterial infections, which could easily be fought by the immune system.<sup>13</sup> Corresponding with the inappropriate use of antibiotics, it has been estimated that over 70 percent of bacteria that cause hospital infections are resistant to at least one antibiotic.<sup>14</sup>

The full consequences of antimicrobial resistance are not yet fully understood, although research suggests that antibiotic misuse may have more immediate impacts on the health of individuals through the disruption of the body's normal internal bacteria. The body's internal bacteria is thought to aid in digestion, assist in building immunity and contribute to effective metabolic function.<sup>15</sup> Antibiotic use may kill this bacteria, and while the bacteria can redevelop, the internal environment is never the same:

*[It was] found that [internal bacteria] did return, but that the microbial community was not exactly as it was before antibiotics disturbed it. And if a person takes the same antibiotic a second time, as late as six months after the first dose, the microbes take longer to come back and the community is deranged even more.*<sup>16</sup>

Continual discoveries in this field and the emergence of new information also make it difficult to quantify costs. However, the discovery of multi-resistant bacteria has shown that antimicrobial resistance is not limited to areas of high clinical antibiotic consumption.<sup>17</sup> CHF is therefore concerned that resistance may be spread more easily and unpredictably than previously thought, and believes that this further underscores the need for action.

**In light of the costs and impacts of antimicrobial resistance, CHF calls for the full and immediate implementation of the JETACAR recommendations.**

<sup>11</sup> Randall, J. (2012) 'Back to the Future – Life Without Effective Antibiotics.' *Australian Pharmacist*. 31(6): 455-457.

<sup>12</sup> Australian Commission on Safety and Quality in Health Care (2011) *Taking Action Towards Combating Antibiotic Resistance in Australia*. Australian Commission on Safety and Quality in Health Care: Sydney.

<sup>13</sup> Randall Op cit.

<sup>14</sup> Steiner, E., Saddler, L. and Fagnan, L. (2004) 'Promoting Appropriate Antibiotic Use: Teaching Doctors, Teaching Patients.' *Californian Journal of Health Promotion*. 2: 22-30.

<sup>15</sup> Ibid.

<sup>16</sup> Kolata, G. (2011) 'The New Generation of Microbe Hunters.' *New York Times*. Available online: <http://www.nytimes.com/2011/08/30/science/30microbe.html?pagewanted=all>

<sup>17</sup> Moellering, R. 2004 'Global antibacterial resistance issues.' *Microbiology Australia*, 28(4), 157.

## Conclusion

CHF welcomes the initiation of this Inquiry and the renewal of interest in this issue. CHF is concerned that in the years since JETACAR handed down its report, there has been inaction on many of its recommendations at the government level.

CHF's submission calls for a renewed, fully coordinated resistance management plan for human antibiotics. In light of the deceleration in the development of new antibiotics, such a plan should explore incentives for research and development on new antibiotics, as well strategies to educate consumers on appropriate antibiotic use.

We have also explored the findings of consumer consultations suggesting that consumer demand for antibiotics is a major contributor to antimicrobial resistance. This is driven by factors such as the need to hasten recovery, the need for reassurance in the treatment of a condition and issues around the cost and availability of medicines.

We believe that stronger public health campaigns, such as those recently initiated by NPS MedicineWise, could contribute to changing these perceptions in line with JETACAR recommendation 19. These should feature a stronger focus on symptom management through medicines for pain and decongestion, and be subject to regular evaluation. CHF also considers that there is a role for prescribing doctors in discussing the lack of efficacy of antibiotics in treating viral and bacterial infections.

Finally, CHF notes that Australians are among the highest users of antibiotics in the developed world. Over twenty million prescriptions for antibiotics are dispensed in Australia each year, more than double the rate of many comparable OECD nations. In light of the scale of antibiotic misuse, as well as the costs and impacts of antimicrobial resistance, CHF calls for the full and immediate implementation of all of the JETACAR recommendations.





The Consumers Health Forum of Australia (CHF) is the national peak body representing the interests of Australian healthcare consumers. CHF works to achieve safe, quality, timely healthcare for all Australians, supported by accessible health information and systems.

CHF does this by:

1. advocating for appropriate and equitable healthcare
2. undertaking consumer-based research and developing a strong consumer knowledge base
3. identifying key issues in safety and quality of health services for consumers
4. raising the health literacy of consumers, health professionals and stakeholders
5. providing a strong national voice for health consumers and supporting consumer participation in health policy and program decision making

CHF values:

- our members' knowledge, experience and involvement
- development of an integrated healthcare system that values the consumer experience
- prevention and early intervention
- collaborative integrated healthcare
- working in partnership

CHF member organisations reach millions of Australian health consumers across a wide range of health interests and health system experiences. CHF policy is developed through consultation with members, ensuring that CHF maintains a broad, representative, health consumer perspective.

CHF is committed to being an active advocate in the ongoing development of Australian health policy and practice.