



Progress with Clear Face Mask Project

Stacey M. Cordwell Carroll, RNCS, PhD (c) ^a

The Association of Medical Professionals with Hearing Losses (AMPHL) has embarked on a very exciting advocacy project promoting the production of a clear face mask. This project was initiated when AMPHL members noted that standard face masks inhibit lip reading. This presented difficulties in clinical rotations and in work settings. For example, health care professionals with hearing loss often have to use caption reporters or note-takers in the operating room because they could not lip read others. Due to these difficulties, many AMPHL members have avoided working in environments where masks are used frequently.

AMPHL members began to realize that a mask with see through capabilities could greatly expand their professional options, and that it could be beneficial to patients—hearing or deaf—as well. As AMPHL officers discussed their hopes with others, they heard many stories: the deaf patient who had to rely on her husband to interpret immediately after their baby was born because she could not lip read the masked health care providers, the child who was in isolation and could never see the smiles of her mother who had to wear a mask to prevent her child from getting an infection, and the child who was frightened about going to the dentist because he could not see the dentist's face. In fact, the clear surgical mask patent inventor, Skip Carlson, created with the idea after his daughter was highly traumatized about going to the dentist. He hoped that this mask could "put the smile back in healthcare." Because of its wide applicability, a clear surgical mask could potentially have a huge market demand.

Kimberly-Clark Corporation holds the exclusive patent on the clear surgical mask. AMPHL officers developed a petition asking that the mask be manufactured or sold to another party who could manufacture it. This petition was begun at the first AMPHL conference in June of 2001. Members ultimately collected over 1500 written signatures and submitted these to Kimberly-Clark. Mr. Osterling, a businessman and an AMPHL member's father, also advocated for AMPHL's cause by contacting Kimberly-Clark. With his help, the petition outcome was successful! Kimberly-Clark stated that the company was willing to work with AMPHL on making the technology available. Corrine Sukiennik from Kimberly-Clark came to Worcester, MA in June of 2002 for a small meeting with AMPHL officers and Mr. Osterling to discuss the mask. She brought an initial prototype for demonstration. The meeting attendees felt that the development of the mask was progressing well. The mask is essentially a standard mask with a "window" cut into it around the mouth area. A see through material is then sewn over this window. The main issue at that time was that the mask continued to fog.

At the second AMPHL conference in July of 2002, Ms. Sukiennik brought prototype masks that were improved from the ones viewed in the Worcester meeting. She explained that Kimberly-Clark had been made aware of the communication issues surrounding mask use and that the Global Technology Transfer division of Kimberly-Clark makes patents available to others who have the capabilities to use them. The challenges to developing this mask are as follows: finding an appropriate design that facilitates lip reading on various face shapes, finding a material that allows for appropriate

filtration as well as visibility, cost, and obtaining 501K approval which is the government regulation for new medical devices. To address these challenges, a focus group was held at the conference.

The focus group was comprised of a small number of AMPHL members and Ms. Sukiennik. Participants felt that the mask, although still fogging slightly, enabled them to lip-read well enough. It would be ideal if the mask could be fog-free, and potential ways to decrease moisture were discussed. Most attendees felt that the flatter pleated mask offered better visibility than did the longer cone mask; the clear area on the pleated mask seems to be situated closer to the lips. The mask was found to be about equal to standard masks in terms of comfort and breathability. Attendees also noted that with manufacture of the masks, medical facilities would be required by the Americans With Disabilities Act (ADA) to have them available for deaf patients and deaf health care providers. Furthermore, there may also be tax credits granted to facilities that purchase these masks because of their requirement to have them available under the ADA.

AMPHL members also completed surveys about the masks during the second annual conference. Input was obtained on members' previous use of surgical masks, desired components of a clear face mask, and cost factors. The results of these surveys will be available on the AMPHL website at <http://www.amphl.org/>.

The progress of this clear surgical mask has been very exciting! AMPHL can be instrumental in making this product available, and this can have a tremendous effect on accessibility in health care. We are continuing to work closely with Kimberly-Clark in an attempt to make this product a reality.

^a Stacey M. Cordwell Carroll is a doctoral candidate in nursing at Boston College. She has a profound bilateral hearing loss and received a cochlear implant in 2000. She is the chairperson of the AMPHL Advocacy committee.