Multimedia Appendix 9. Communication to or between health care providers – overview of GIS articles

Research	Aims	Findings
Country and		
reference		
USA [263]	To provide a synopsis of some	The biggest challenge is to ensure that
	suggestions and comments by	maps of health statistics inform
	practitioners on how best to	without misinforming. Advances in
	communicate the results of spatial	the sciences of cartography, statistics,
	analyses of health data.	and visualization of spatial data are
		constantly expanding the toolkit
		available to mapmakers to meet this
		challenge. Asking potential users to
		answer questions or to talk about what
		they see is still the best way to
		evaluate the effectiveness of a specific
		map design.
USA [264]	The objective was to determine	This collaboration resulted in the
	whether utilizing GIS could help	development of a perinatal GIS model
	a community to identify risk and	that helped community members to
	develop potential interventions to	decide where to focus interventions
	address perinatal health problems.	and in continued use of GIS
		for planning.
USA [265]	To summarize a methodology and	No findings
	demonstrate the potential of this	
	free and open standard to contribute	
	to the dissemination of Expanded	
	Program on Immunization (EPI)	
	information by providing	
	interactive maps to a wider	
	audience through the Internet.	
USA [266]	To describe the delivery of training	Participants enhanced competencies
	work- shops to enhance the	and skills in biodefense informatics
	competencies of health workers in	and data management. Self-reported

	biodefense informatics and	evaluation indicated that knowledge
	discusses its implication for	increased upon completion of the
	delivering education to rural	training. The majority (97%) of the
	regions.	participants found the workshops
		relevant and useful, and many noted
		that the courses enhance their
		preparedness efforts.
USA [267]	To gain CCC program managers's	GIS use for cancer control has the
	insights about the compatibility of	potential to build community capacity
	GIS mapping for CCC, the target	and social capital for communities as a
	audiences to be reached with maps	way to reduce the cancer burden.
	as a CCC message, and relative	
	advantages of this technology in its	
	diffusion.	
UK [268]	(i) to explore how public health	Interviewees were positive about the
	professionals perceive and value	value of GIS in public health practice
	GIS technologies; (ii) to examine	but many were quick to express that
	the advantages and disadvantages	they were not a panacea or wonder
	associated with the use of GIS	tool that could be used to inform
	outputs in public health decision-	decision-making in relation to all
	making; and (iii) to consider the	types of public health problems. Most
	potential for GIS as vehicles for	interviewees were aware of both the
	data sharing and facilitating intra-	advantages and disadvantages of using
	and inter-agency collaboration.	GIS outputs in decision-making.
UK [269]	To conduct a pilot study into the	Novice users of disease maps had
	comprehension and visualisation	difficulties in interpreting data
	preferences of geographic	
	information by public health	supplementary information in the form
	practitioners (PHPs), particularly in	of box plots and histograms, and in
	the context of interactive, Internet-	making use of links
	based atlases.	between interactive tabular and
		cartographic information. Choices for
		colour plans when viewing maps
		showed little agreement between

users, although pre-viewing comments
showed preferences for red-blue
diverging schema.