

I. Program Name: MS in Healthcare Interpretation, National Technical Institute for the Deaf (NTID)

II. Describe goals and justification for proposed program

a. Justification

i. The Department of American Sign Language and Interpreting Education at NTID is proposing a master of science program in Healthcare Interpretation which will:

- meet the growing demand of specialized healthcare interpreters as more and more deaf and hard-of-hearing people enter the medical/healthcare fields,
- increase the number of specialized interpreters working in patient healthcare settings, and
- prepare interpreters to work in administrative roles in ensuring language access to patients in hospital settings.

The Task Force on Health Care Careers for the Deaf and Hard-of-Hearing Community, a historic partnership between RIT/NTID; the University of Rochester's National Center on Deaf Health Research; Gallaudet University; and Rochester General Health Systems (RGHS) was formed in 2010 to address the limited opportunities for qualified deaf and hard-of-hearing individuals to pursue healthcare careers. "Throughout its 18 months of research, inquiry and discussion, the Task Force repeatedly saw the limitations and barriers often imposed on deaf and hard-of-hearing (HH) individuals in the health care fields" (Building Pathways to Health Care Careers for the Deaf and Hard-of-Hearing Community: A Final Report, p. 9). The task force published its preliminary findings and short-term recommendations in Building Pathways to Health Care Careers for the Deaf and Hard-of-Hearing Community: An Interim Report (2011) and its long-term recommendations in a comprehensive Building Pathways to Health Care Careers for the Deaf and Hard-of-Hearing Community: A Final Report (2012) with the ultimate vision that by the year 2022, "deaf and hard-of-hearing individuals across the country will have levels of access to education, employment and career advancement in a variety of healthcare occupations that match their skills and aspirations" (Building Pathways to Health Care Careers for the Deaf and Hard-of-Hearing Community: A Final Report p. 2). One of the major barriers identified in the Task Force report was deaf and hard-of-hearing individuals' ability to access information. Those individuals currently pursuing training in healthcare report the limited availability of quality access services, particularly sign language interpreters with specialized knowledge in the healthcare settings (Building Pathways to Health Care Careers for the Deaf and Hard-of-Hearing Community: An Interim Report, p. 20). If the 2022 strategic vision of the Task Force on Health Care Careers for Deaf and Hard-of-Hearing individuals is to be realized, the training of ASL/English interpreters with a specialization in healthcare must be addressed. The Task Force's Final Report includes the recommendation that NTID/RIT take the lead in the identification and development of best practices with respect to specialized interpreting for deaf and hard-of-hearing individuals in healthcare fields.

ii. Because deaf patients in healthcare settings continue to be hampered by the lack of language access, an even larger need exists for specialized training for interpreters providing ASL/English interpreting. A needs assessment (2009) conducted by the National Consortium of Interpreter Education Centers (authorized and funded by the Rehabilitation Services Administration through the US Department of Education) surveyed deaf consumers' access to interpreting services. The survey identified healthcare as the most important setting for interpreting services (78% of respondents) and paradoxically, also the setting respondents identified as the 'most difficult' (52%) for obtaining interpreting services.

iii. Currently in the US, the Registry of Interpreters for the Deaf (RID), the national association and certifying body of sign language interpreters, lists 45 BA/BS degree programs and 4 MA/MS degrees in American Sign Language/English interpreting. Of all of these programs, none offer specialized training in the healthcare arena beyond introductory coursework. Most bachelor level programs focus on generalist level training for interpreters and do not prepare graduates to specialize in a particular setting. At the 2013 National RID Conference, a motion was made to investigate healthcare as a specialty certification area within the sign language interpreting field because language access remains a matter of national importance. Healthcare organizations continue to face challenges to accommodate increasingly diverse patient populations, i.e. more than 28 million people with hearing loss and about 47 million people who speak a language other than English. There are approximately 7,000 hospitals in the U.S. providing language access services to diverse patient care populations. Additionally, the New York Public Health Law, Article 28, mandates hospitals to designate a Language Access Coordinator to facilitate the provision of language access services. The healthcare administration courses found in the MS degree will position our graduates to assume leadership positions within healthcare systems nationwide for the administration of Language Access Services.

iv. Recognizing the critical need for deaf patient access to quality interpreting in healthcare settings, in 2010 NTID established a nine-month, non-credit Certificate in Healthcare Interpreting (CHI) program. This blended program focuses on interpreting for deaf patients within healthcare systems and currently reaches a national audience. The current CHI class had an applicant pool of 55 students and accepted 15 students from 12 different states. The response to this new program has been outstanding and speaks to the need for training in the specialty area of healthcare interpreting. While this certificate will continue to be offered, it does not adequately address the complex interpreting skill sets needed for interpreting in healthcare educational programs and especially for healthcare professionals. The proposed MS program is distinctly different in that it requires a bachelor's degree for admission and focuses on more than the interpreting knowledge and skill improvement which comprise the CHI program.

v. NTID's Strategic Decisions 2020 calls for the establishment of a MS degree to add to its degree portfolio. In addition, it calls for the expansion of NTID's role as a National Resource Center of Excellence. The proposed MS degree in Healthcare Interpretation effectively matches the criteria for the establishment of such a degree. This degree will provide a unique market niche that is unparalleled both nationally and internationally.

vi. The Department of American Sign Language and Interpreting Education (ASLIE) currently houses the following:

- a four-year, BS degree in ASL/English Interpretation with an emphasis towards the generalist interpreter
- the non-credit, Certificate in Healthcare Interpreting (CHI) program, which focuses on interpreting in healthcare settings, aimed at providing deaf and hard-of-hearing consumers access to patient healthcare.

In addition to these academic programs, ASLIE faculty member, Peter C. Hauser, Ph.D., principal investigator, holds a National Institute of General Medicine grant (\$2.1 million) through the National Institute of Health to provide support for deaf and hard-of-hearing graduate students who strive for doctoral training in the biomedical sciences or behavioral sciences.

The proposed degree program in healthcare interpreting is a logical next step for the expansion of degree options within ASLIE. Rochester is uniquely positioned to offer an MS in this area of specialization due to the large number of deaf health professionals in the area whose expertise can be tapped to deliver the curriculum. With the addition of the MS degree in Healthcare Interpretation, ASLIE will be at the forefront of a national effort to provide specialized, high quality interpreting services to deaf and hard-of-hearing individuals in the healthcare arena.

b. Program Goals

The following goals include the knowledge, skills and abilities of the graduates of the MS in Healthcare Interpretation.

- i. To enhance students' skill set and knowledge to effectively interpret for deaf consumers (patients and family members) in healthcare environments.
- ii. To enhance students' skill set and knowledge to effectively interpret for deaf health professionals in academic and clinical settings.
- iii. To develop students' administrative skills enabling them to analyze, conduct, and consult on the effective and efficient provision of interpreting services in healthcare institutions.

- iv. To guide students in integrating their learning in a final project or research paper that is significant to interpreting and/or language access administration in healthcare environments.

III. Description of the new program

- a. Curriculum: This innovative curriculum will employ a blended pedagogical approach including a face-to-face, on-site summer institute, online coursework and webinars as the primary delivery systems. This online format allows students to pursue their degree while maintaining full-time employment. Another distinct advantage of this online program is that the participants' diverse geographic locations will allow for examining multiple perspectives in the delivery of language access services.

The prerequisites for program admission are a bachelor's degree from an accredited college/university and RID certification. Prior to beginning the program the student must complete a course in medical terminology.

The curriculum will require the completion of 33 semester credits with ten required courses (30 semester credits) including a summer professional seminar and one elective (three semester credits) and can be completed in one and half academic years (with two summers) for full-time students or completed in two academic years (with two summers) for part-time students. The ten required courses and electives include:

- Summer 1: HCIA 700 - Professional Seminar* (3) (Face-to-Face)
- Fall 1: HCIA 710 - Human Body Systems/Diseases I* (3) (Online)
 HCIA 720 - Healthcare Practical Interpreting I*(3) (Online)
 HCIA 760 - Theories of Translation and Interpretation **(3) (Online)
- Spring 1: HCIA 730 - Human Body Systems/Diseases II* (3) (Online)
 HCIA 740 - Healthcare Practical Interpreting II* (3) (Online)
 HLTH 700 - Research Design and Methods*** (3) (Online)
- Summer 2: Elective-choose one of the following:
 HCIA 750 - Working as a Designated Interpreter in Healthcare** (3) (Online)
 HLTH 745 - Healing Cultures within Health Organizations*** (3) (Online)
- Fall 2: HLTH 710 - Healthcare, Governance, Law, Policy and Economics*** (3) (Online)
 HCIA 770 - Professional Project or Research Paper ** (3) (Online)
 HLTH 715 Reinventing Healthcare *** (3) (Online)

*New Courses in ASLIE with expanded content from what is taught in CHI program in ASLIE

** New Courses in ASLIE

***Courses from CHST

IV. RIT Academic Portfolio Blueprint Characteristics and Criteria

The program's mission is aligned with the University's mission through the development of a new and emerging career area, which is set to experience substantial growth in the coming years. As outlined in RIT's Academic Portfolio Blueprint Characteristics and Criteria, this program satisfies several areas. This program will facilitate growth in student and faculty scholarship and creative work, and enhance innovative, creative and entrepreneurial activities related to healthcare interpreting. This program will foster integration between and among disciplines, programs and colleges (NTID and the College of Health Science and Technology). Currently, this program will focus on interpretation between American Sign Language and English, however, this program has the potential for expansion to include other languages in the future.

V. Synergy with other programs

The MS degree in Healthcare Interpretation is a collaborative degree fostering integration between NTID's American Sign Language and Interpreter Education program and the College of Health Science and Technology's MS in Health Systems Administration. It will integrate the content areas of human body systems and diseases, theoretical practical applications of interpreting, and foundation coursework in policy and law formation, healthcare economics, innovation, leadership and research. The coursework in this program could lead to employment as an interpreter and/or an administrator or supervisor of interpreting services in one of the most important new fields in healthcare. Integrating interpreting theory and healthcare administration into the healthcare model of our society is a necessary and appropriate development to address the most pressing access-related issues in medical settings faced by our nation. The NTID MS in Healthcare Interpretation will collaborate with the College of Health Sciences and Technology (CHST) MS in Health Systems Administration curriculum giving students an understanding of the administrative issues that will influence healthcare interpreting and issues concerning access to interpreting services in medical settings.

VI. Administrative structure for the new program

The MS in Healthcare Interpretation will be administered under the American Sign Language & Interpreting Education (ASLIE) department at the National Technical Institute for the Deaf (NTID). At present, Dr. Kim Kurz, Chair of ASLIE, Lynn Finton, Director of the ASL-English Interpretation BS program and Kathy Miraglia, Coordinator of the Certificate in Healthcare Interpreting (CHI), will perform administrative duties under the supervision of Dr. Stephen Aldersley, Associate Vice President for Academic Affairs at NTID.

VII. Enrollment Management Expectations and Sustainment

During a recent meeting with Dr. Richard Doolittle, Vice Dean of the College of Health Sciences and Technology (CHST), and Dr. William Walence, Program Director, MS in Health Systems Administration, the Healthcare Interpretation proposal was discussed including timelines and resources. Both of them provided feedback and enthusiastically supported the proposal, including the provision of CHST courses. Our team also met with Neil Hair, Interim Executive Director of the Innovative Learning Institute (ILI) and Therese Hannigan, Interim Director of RIT Online at the ILI to discuss their role in providing support to our MS program. They have also provided full support. Hiroko Yamashita, Chair of Modern Language and Cultures Department has wholeheartedly supported this program and expressed an interest in the possibility of including other languages in our program in the future.

The proposed MS program in Healthcare Interpretation provides the opportunity to expand current ASLIE offerings and resources and target a growing market segment in the healthcare interpreting area. The program could attract undergraduates from the 45 bachelor degree programs in ASL/English interpretation throughout the country. In addition if offered online, working professionals with backgrounds in interpreting with interest in working as healthcare interpreters /administrators in the healthcare systems, would be potential candidates.

The enrollment goal will be eight (FTE) new students in the first year that the program is offered; ten (FTE) new students in the second year that the program is offered, and 12 (FTE) new students each subsequent year. (See table below for total enrollments projected per semester for years 1-5 of the program.) This program will be offered as either full-time or part-time.

Enrollment	Year 1 AY16-17	Year 2 AY17-18	Year 3 AY18-19	Year 4 AY19-20	Year 5 AY20-21
Enrollment Fall Semester	8	18	22	24	24
Enrollment Spring Semester	8	10	12	12	12
Total Semesters of Enrollment	16	28	34	36	36

Dr. Jim Miller, Sr. VP Enrollment Management and Career Services, reviewed the concept paper and cost model and supports the market viability of the proposal. He estimates that “true demand is sufficient to support higher targets than used in this proposal.” He noted the “collaborative and creative way NTID and RIT are addressing through this degree program the importance of providing and increasing rewarding career opportunities for Deaf and Hard-of-Hearing individuals in healthcare.” The enrollment goals are quite conservative “due a number of factors including full-time and part-time study options, and significant on-line course availability.” Further, he stated that “Because the financial model proposed is based on net tuition generated through full-time equivalent enrollments, enrollments will need to be managed carefully and increased if the

enrollments contain significant numbers of part-time students in any particular year.” In summary, his is “in full support of this new MS degree.”

VIII. Impact on Resources

Utilization of Existing Resources

There will be an impact on the resources available to the Department of American Sign Language & Interpreting Education at the National Technical Institute for the Deaf. Each year, six MS interpreting related courses will be taught by current ASLIE faculty (permanent and adjunct) thus resulting in the need for additional monies to cover other ASLIE courses that they would have taught. Some of the resources utilized by the MS in Healthcare Interpretation program will come from the current BS program in ASL-English Interpretation and the CHI Program. This and additional expenditures are detailed in the NTID Cost Model Tables 1-4 along with the enhanced revenue this program will generate. There are many inexpensive and convenient interfaces available for on-line teaching and learning. Students and faculty will need only a laptop, a webcam and several inexpensive software programs designed for online meetings.

Cost Model Analysis

The NTD cost model analysis, which will be forwarded to the Provost, includes four tables detailing projected expenditures and revenue over the first five years of the program. There is \$5000 in anticipated capital expenditures. Faculty/staff salary and benefits plus costs such as honoraria, hospitality, advertising, computer charges, instructional supplies, equipment, travel/conferences, and tuition payments for RIT credits total approximately \$760K. These costs are projected to be offset by more than \$1.25M in tuition revenue. Total revenue minus expenses over the five years is estimated to be approximately \$485K.

IX. Conclusion

This document lays out, on a conceptual basis, the general proposal for a formal program of study in healthcare interpreting which will create a new avenue of scientific inquiry. With its coordinated mission and integrated presence on campus, the Master of Science in Healthcare Interpretation will be a timely and innovative addition to the University’s graduate portfolio and to the profession of interpreting. With the resources and culture of RIT, the Healthcare Interpretation program will be the first of its kind to produce highly competent, pioneering interpreters in the field of healthcare.

X. Summary of Community Feedback

The MS in Healthcare Interpretation Concept Paper was posted for community vetting from 2/28/14 to 3/28/14. During that time feedback was received from two individuals. Both were fully supportive of the proposed program. One noted that

this is a “well planned and innovative approach to meeting NTID’s and RIT’s strategic plans as well as meeting a pervasive need for the Deaf community.” The other stated that it has been “a long time coming that this ‘specialization’ is actually on the table for consideration” and “...having interpreters with background in the field will have an impact on the quality of the interpreting work in that arena.” Additionally, it was noted that this concept paper “has all the necessary backing from various constituents who would/could have a stake in this program.” (See section VII, page 6 of this concept paper for references to support from CHST and the ILI.)

References:

- National Technical Institute for the Deaf at Rochester Institute of Technology (2010). *Strategic Decisions 2020: Shaping NTID’s Future Through Innovation*. Retrieved from: <http://www.ntid.rit.edu/president/sd2020>
- Task Force on Health Care Careers for the Deaf and Hard-of-Hearing Community (2012). *Building Pathways to Health Care Careers for the Deaf and Hard-of-Hearing Community: A Final Report*. Retrieved from: http://www.rit.edu/ntid/hccd/system/files/FINAL_REPORT_Building_Pathways_March_2012.pdf
- Task Force on Health Care Careers for the Deaf and Hard-of-Hearing Community (2011). *Building Pathways to Health Care Careers for the Deaf and Hard-of-Hearing Community: An Interim Report*. Retrieved from: http://www.rit.edu/ntid/hccd/system/files/task_force_june_interim_report_6_30_2011.pdf
- The National Consortium of Interpreter Education Centers. *Phase II Deaf Consumer Needs Assessment Final Report*. Retrieved from: <http://www.interpretereducation.org/wp-content/uploads/2011/06/FinalPhaseIIDCReport.pdf>

AMERICAN SIGN LANGUAGE AND INTERPRETING EDUCATION
MS in Health Care Interpreting Degree Program
Projected Expenditures For The Proposed Program

Table 1

	Year 1 AY16-17	Year 2 AY17-18	Year 3 AY18-19	Year 4 AY19-20	Year 5 AY20-21
Faculty Positions	\$ 55,600	\$ 57,000	\$ 58,400	\$ 59,800	\$ 61,200
Adjuncts	\$ 18,000	\$ 31,200	\$ 33,600	\$ 36,000	\$ 38,400
Staff Assistant	\$ 2,700	\$ 2,800	\$ 2,900	\$ 3,000	\$ 3,100
	Faculty	\$ 91,000	\$ 94,900	\$ 98,800	\$ 102,700
Honoraria	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800
Hospitality	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200
Advertising	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
Travel-Conferences	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
Instructional Supplies	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
Computer Charges	\$ 12,000	\$ 28,100	\$ 35,600	\$ 37,000	\$ 38,300
Equipment	\$ 3,000	\$ 500	\$ 500	\$ 500	\$ 500
Tuition Payments for RIT Credits	\$ 31,900	\$ 73,900	\$ 93,900	\$ 106,500	\$ 110,700
	Other	\$ 108,500	\$ 136,000	\$ 150,000	\$ 155,500
	Total	\$ 129,200	\$ 199,500	\$ 230,900	\$ 248,800
	New Resources	\$ 70,900	\$ 139,700	\$ 169,600	\$ 186,000
		\$ 193,900		\$ 193,900	

AMERICAN SIGN LANGUAGE AND INTERPRETING EDUCATION

MS in Health Care Interpreting Degree Program

Table 2
Projected Revenue From New Students

	Year 1 AY16-17	Year 2 AY17-18	Year 3 AY18-19	Year 4 AY19-20	Year 5 AY20-21
Enrollments Summer Semester	8	18	22	24	24
Enrollments Fall Semester	8	18	22	24	24
Enrollments Spring Semester	8	10	12	12	12
Total Semesters of Enrollment	24	46	56	60	60
Semester Tuition Rate \$	8,369	\$ 8,704	\$ 9,052	\$ 9,414	\$ 9,791
Additional Tuition Revenue	\$ 116,500	\$ 220,400	\$ 278,700	\$ 308,500	\$ 320,800

**AMERICAN SIGN LANGUAGE AND INTERPRETING EDUCATION
MS in Health Care Interpreting Degree Program**

**Table 3
Projected Capital Expenditures**

	Year 1 AY16-17	Year 2 AY17-18	Year 3 AY18-19	Year 4 AY19-20	Year 5 AY20-21
Capital Facilities	\$0	\$0	\$0	\$0	\$0
Equipment	\$3,000	\$500	\$500	\$500	\$500
Total Capital Expenditures	\$3,000	\$500	\$500	\$500	\$500

**AMERICAN SIGN LANGUAGE AND INTERPRETING EDUCATION
MS in Health Care Interpreting Degree Program**

**Table 4
NTID Financial Viability and Resources
NEW PROGRAM EXPENSES/REVENUE
ESTIMATES**

	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	Total
Incremental Personnel	\$ 18,000	\$ 31,200	\$ 33,600	\$ 36,000	\$ 38,400	\$ 157,200
Other Expenses	\$ 18,000	\$ 34,100	\$ 41,600	\$ 43,000	\$ 44,300	\$ 181,000
Cross Registered Tuition	\$ 31,900	\$ 73,900	\$ 93,900	\$ 106,500	\$ 110,700	\$ 416,900
Incremental Equipment	\$ 3,000	\$ 500	\$ 500	\$ 500	\$ 500	\$ 5,000
						\$ -
						\$ -
						\$ -
						\$ -
Expense	\$ 70,900	\$ 139,700	\$ 169,600	\$ 186,000	\$ 193,900	\$ 760,100
Overhead*						\$ -
Incremental Library						\$ -
Acquisitions						\$ -
Incremental Space						\$ -
						\$ -
Total Expense	\$ 70,900	\$ 139,700	\$ 169,600	\$ 186,000	\$ 193,900	\$ 760,100
Enrollment **	\$ 8	\$ 18	\$ 22	\$ 24	\$ 24	\$ 96
Tuition @ 2016-2017 + 4%	\$ 116,500	\$ 220,400	\$ 278,700	\$ 308,500	\$ 320,800	\$ 1,244,900
Discount @ 33 %						\$ -
						\$ -
Total Revenue	\$ 116,500	\$ 220,400	\$ 278,700	\$ 308,500	\$ 320,800	\$ 1,244,900
Total Rev. - Total Exp.	\$ 45,600	\$ 80,700	\$ 109,100	\$ 122,500	\$ 126,900	\$ 484,800

* College total cost per CHG/Direct Cost per CHG
** Incremental students as projected by EMCS

This table estimates major incremental program expenses and revenues for the purpose of curricular review. The figures have not yet been reviewed by Finance & Administration Staff. Funding for the proposed program is not assured, and does not assure program funding.