PUBLIC POLICY CENTER
Health Policy
Biostatistician

University Classification: Statistician / Biostatistician

UI Job Code: PRL1
UI Pay Level: 5A
Job Function: Research
Job Family: Research Statistics

Working Title (if applicable): Biostatistician

Position #: 00174438
Org/Dept/Sub-dept #: 04 / 0220
Position Reports to: Momany, Elizabeth
Name 00017125
Position #

Does this position have Administrative Supervision? [ ] Yes [x] No

Position Specific Summary:
Under the supervision of the Assistant Director of the Health Policy Research Program, support researchers by applying mathematical, statistical and biostatistical knowledge to a variety of health policy research projects. Validate statistical/biostatistical research information and prepare specific documentation for funding proposals, publications and/or presentations. This position is a member of the Health Policy Research Program at the Public Policy Center and will work closely with several investigators and other research and data management staff.

Key Areas of Responsibilities and Specific Job Tasks

<table>
<thead>
<tr>
<th>Classification</th>
<th>Key Areas of Responsibilities</th>
<th>Specific Job Duties and Tasks</th>
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<tbody>
<tr>
<td>Consultation</td>
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<td>Advise investigators on alternative statistical methods.</td>
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<td>Prepare statistical sections for studies.</td>
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<td>Communicate key statistical findings to team leaders and investigators.</td>
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| Statistical Analysis |                               | Prepare and review data for validity and accuracy and recommend additional tests and modifications, if necessary. |
|                      |                               | Create, test and validate programs that generate data summaries and data listings for reports using statistical packages. |
|                      |                               | Create, test and validate programs that perform statistical and graphical analyses. |
|                      |                               | Determine appropriate analysis techniques. |
|                      |                               | Assess the validity of data analytic assumptions for the present data. |
|                      |                               | Analyze and report on methods and trends in data analysis techniques and apply them to data sets. |
|                      |                               | Assure data fit models required by the statistical methods. |
|                      |                               | Create, organize, document, maintain and archive statistical analysis programs, data sets and results. |

| Presentation / Publication Assistance |                               | Assist in preparation of grant applications. |
|                                      |                               | Prepare statistical analysis sections for research presentations and publications. |

| Human Resources / Leadership |                               | May provide direction, assignments, feedback, coaching and counseling to assure outcomes are achieved. |
|                            |                               | May provide functional and/or administrative supervision of staff. |

Other duties as assigned.

Universal Competencies

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<th>Positive Impact/Achieving Results</th>
<th>Expected Proficiency Level: Working</th>
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<td>Adjusts to and develops self to prepare for new or changing assignments,</td>
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</table>
| Ability to utilize existing resources and learning to achieve or exceed desired outcomes of current and future organizational goals/needs. Able to demonstrate ethical behavior in diverse situations while producing results. | processes, people, and priorities as organizational needs dictate.  
- Sets clear expectations for self and team to achieve work objectives and overcome obstacles.  
- Strives for excellence in performance by upholding established ethical standards and upholding university values  
- Provides frequent updates on operations and financial performance to leadership. |
| Service Excellence/Customer Focus | Expected Proficiency Level: Working  
- Enhances service by seeking ways to add value to customer interactions/services.  
- Demonstrates sincere concern and takes responsibility when a customer complains, even if the cause of the problem lies elsewhere.  
- Listens to feedback without defensiveness and uses it to enhance communication effectiveness.  
- Communicates in alternative ways to accommodate different listeners. |
| Collaboration and Embracing Diversity | Expected Proficiency Level: Working  
- Shares appropriate information/feedback openly, professionally and respectfully.  
- Models open, respectful, accepting, and supportive behaviors with team members.  
- Maintains productive work relationships while considering multiple perspectives and using effective conflict resolution practices.  
- Uses sensitivity in communicating with individuals of diverse backgrounds. |
| **Technical Competencies** |  
**Data Analysis Tools** |  
- Anticipates the need for data analysis tools based on the organization's situation.  
- Evaluates diverse tools for data analysis and categorization functions.  
- Predicts risks in diverse data analysis tools and prepares contingency plans.  
- Appraises the associated costs and benefits of various data analysis tools.  
- Minimizes potential risks involved in the process of using data analysis tools.  
- Coaches others on the proper selection and use of various data analysis tools. |
|  
**Data Gathering and Analysis** |  
- Oversees data gathering and analysis activities for the project(s).  
- Advises on advanced data gathering and analysis methodologies and technologies.  
- Evaluates the pros and cons of various data analysis methods for the project(s).  
- Implements procedures and policies within a data processing function.  
- Teaches others how to improve the validity and reliability of data used in various analyses.  
- Evaluates best practices of data gathering and analysis. |
|  
**Statistical Analysis and Measurement** |  
- Participates in the gathering and documenting of statistical measurements.  
- Uses common statistical terms such as variance, standard deviation, and correlation.  
- Analyzes and interprets common statistical data and reports.  
- Explains factor analysis and its use within the organization.  
- Determines specific financial performance measurements for a specific business unit. |
Accuracy and Attention to Detail
- Processes detailed information with high levels of accuracy.
- Productively balances speed and accuracy.
- Implements a variety of cross-checking approaches and mechanisms.
- Evaluates and makes contributions to best practices.
- Demonstrates expertise in quality assurance tools, techniques, and standards.
- Employs techniques for motivating personnel to meet or exceed accuracy goals.

Analytical Thinking
- Chooses among a diverse set of analytical tools according to the nature of the situation.
- Identifies many possible causes for a problem based on prior experience and current research.
- Quantifies the costs, benefits, risks and chances for success before recommending a course of action.
- Seeks discrepancies and inconsistencies in available information; explains variances.
- Organizes and prioritizes the sequence of steps to be taken to remedy the situation.
- Approaches a complex problem by breaking it down into its component parts.

Research Documentation
- Designs, writes and publishes numerous research documents on diverse topics.
- Determines which types of graphs and charts to use to best communicate research findings.
- Edits and revises research documents written by others.
- Guides others on the proper method for citing, footnoting and documenting other researchers’ work.
- Evaluates procedural differences between hardcopy publishing versus web publishing documentation.
- Facilitates implementation of websites designed to contain published research.

As part of performing the key areas of responsibility and competencies described above, staff members are expected to meet reasonable standards of work quality and quantity, as well as expectations for attendance established by their supervisor. Staff members are also expected to comply with policies governing employee responsibilities and conduct, including those contained in the University Operations Manual.

Position Qualifications
(This section only needs to be completed when recruiting for the position).

<table>
<thead>
<tr>
<th>Education or Equivalency Required</th>
<th>A Master’s degree in statistics or biostatistics or related field or an equivalent combination of education and experience is required.</th>
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<tbody>
<tr>
<td>Required Qualification</td>
<td>3-5 years of experience using biostatistical methods in a professional setting to perform data manipulations, graphical presentation, and biostatistical analysis.</td>
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<td>Required Qualification</td>
<td>3-5 years using statistical software and programming languages (e.g. SAS, R, STATA) in a professional setting.</td>
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<td>Required Qualification</td>
<td>Demonstrated ability to articulate biostatistical analysis presented to non-statisticians in a professional setting.</td>
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<tr>
<td>Required Qualification</td>
<td>Excellent written, verbal and interpersonal communication skills.</td>
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<tr>
<td>Desirable Qualification</td>
<td>A PhD in statistics or biostatistics or an equivalent combination of education and experience.</td>
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<tr>
<td>Desirable Qualification</td>
<td>1-3 years with sample size and power calculations using actual research data in a professional setting.</td>
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<tr>
<td>Desirable Qualification</td>
<td>1-3 years experience using large medical claims databases.</td>
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<tr>
<td>Desirable Qualification</td>
<td>1-3 years experience writing statistical and/or biostatistical analysis reports and summaries in a collaborative research, professional setting.</td>
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<tr>
<td>Desirable Qualification</td>
<td>Demonstrated technical writing skills.</td>
</tr>
</tbody>
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Applicable background checks will be conducted.

The University of Iowa is an equal opportunity/affirmative action employer. All qualified applicants are encouraged to apply and will receive consideration for employment free from discrimination on the basis of race, creed, color, national origin, age, sex, pregnancy, sexual orientation, gender identity, genetic information, religion, associational preference, status as a qualified individual with a disability, or status as a protected veteran.