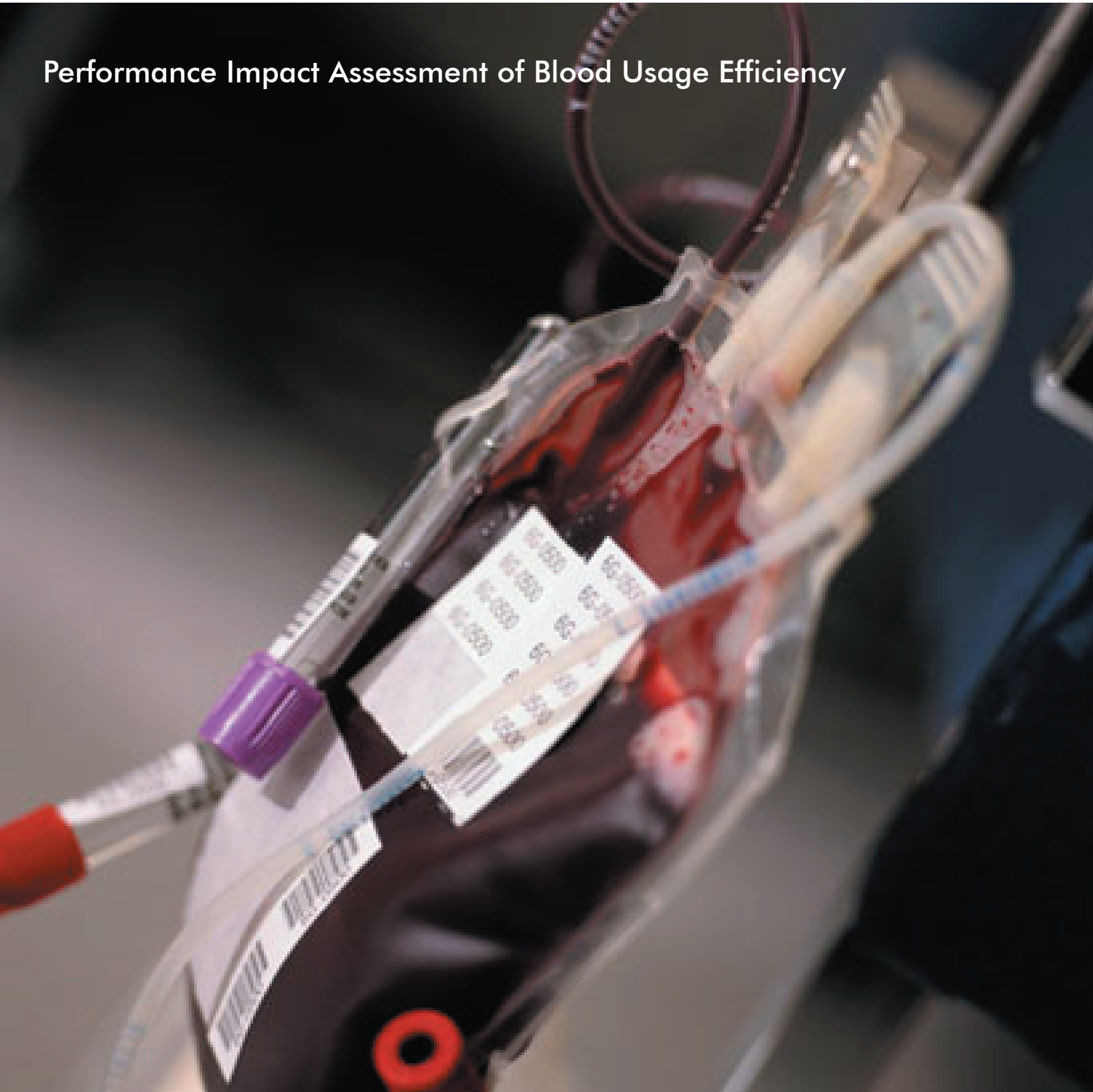




COLUMBIA **HEALTHCARE** ANALYTICS, INC.

## Performance Impact Assessment of Blood Usage Efficiency





## The Objective

To document current transfusion practices and to identify inefficient or ineffective blood utilization practices.

## The Goal

To dramatically reduce blood transfusion costs through optimal medical utilisation review and oversight.

Our goal is to provide excellent quality to our clients through unparalleled service and exceptional communication.

Only 100 percent client satisfaction is satisfactory.

### Our Values

- Honesty
- Respect
- Responsibility
- Fairness
- Compassion

### Vision

Optimal healthcare through ethical strategies, best practices and an unwavering commitment to exceptional communication, service and quality is our vision.

### Mission

The mission of Columbia Healthcare Analytics, Inc. is to advance quality and economic efficiency of the healthcare industry through innovative, analytical approaches to patient care.





## Executive Summary

Columbia Healthcare Analytics, Inc. is a private healthcare consulting and management services business with offices in Glendale, California and Victoria, British Columbia, Canada started in 2006.

Columbia Healthcare Analytics, Inc. provides consultative services and a unique web-based utilization review system to healthcare organizations. Our service makes possible the objective examination of institutional records by one or more trained reviewers in a timely manner.

Patient confidentiality is preserved through a controlled process that redacts personal information prior to external review. These programs are designed to enhance the delivery of patient care, while reducing healthcare costs and liability.

Our current services include utilization review designs for blood transfusion therapy, diagnostic pathology services and clinical patient care.

## Problems of Traditional Utilization Review Programs:

- Poor medical staff participation
- Intra-institutional analysts are often not objective for political reasons
- Intra-institutional norms often do not reflect national norms
- Inefficient outcomes with limited impact upon patient care or financial performance
- Physician-specific performance data is difficult to tabulate
- Benchmarking professional performance with regional, national and international levels is challenging at best

## Current Challenges Facing Transfusion Practices

- The cost of blood components has been increasing as much as 13% per year during the past ten years
- Usage of blood components has been increasing as much as 21% per year during the past five years
- Outside supply costs represent a substantial cost to healthcare organizations, typically in excess of one million dollars
- Blood transfusion is a hazardous form of biologic therapy, fraught with adverse outcomes that are frequently unappreciated by physicians and other healthcare workers
- As many as 50% of patients receive one or more blood component transfusions that are medically unnecessary
- Unnecessary blood transfusions are hazardous to patient health, increase healthcare costs by hundreds of thousands of dollars and increase legal liability
- Institutions typically lack individuals familiar with modern transfusion medicine principles
- Outcomes for transfusion data analysis by healthcare organizations fail to optimize patient transfusions, lower healthcare costs and alleviate the short supply of blood units





## Benefits of Columbia Healthcare Analytics, Inc Strategy for Transfusion Management

- “Low Risk” initial assessment of current transfusion practices suitable for supporting compliance with accreditation standards
- An ethical “Clean Hands” approach to utilization review performed by trained independent and objective reviewers.
- Improved patient care practices leading to safer patient care
- Reduction in inappropriate blood usage therapy resulting in hundreds of thousands of dollars in reduced patient care cost for:
  - > Blood supply
  - > Nursing time associated with administration of transfusion therapy
  - > Laboratory management for storing and processing blood
  - > Adverse reactions associated with transfusion
  - > Treating blood borne illnesses acquired by transfusion
- Elimination of inefficient, ineffective UR review positions (salary and benefit expenses for one or more employees)
- Reduced liability exposure, beneficially impacting insurance rates
- Alleviation of critical blood shortage through conservative management
- Use of redaction software, provided by Columbia Healthcare Analytics, Inc. to guarantee the confidentiality of medical records for IRB-related hospital activities

## Analysis of Transfusion Practices

Columbia Healthcare Analytics, Inc. will review blood usage for 30 patients transfused at [ ] between July and December 2005.

Charts will be selected based upon the following criteria:

- At least 20 patients will have received transfusions on 2 or more days
- At least 15 patients will have received transfusions in the intensive care unit or operating room
- At least 5 patients will be selected from the obstetric/gynecology service
- At least 5 patients will be selected from the emergency service

Flagging criteria will be discussed personally with the client and must be conditionally accepted by [ ] prior to final acceptance of this proposal .

Information required for this study will be obtained from the following medical chart documents:

- Emergency department record
- Surgeon operative report(s)
- Operating room record (s)
- Anesthesia record (s)
- Laboratory cumulative report for hemoglobin, platelet count and coagulation studies
- Transfusion cumulative report
- Transfusion product chart copies
- Admission history & physical
- Discharge summary
- Nursing vital sign reports

Columbia Healthcare Analytics, Inc. will provide a proprietary transfusion report for each patient review performed. These reports will be prepared and discussed with the client within 30 days of data submission. A summary of the reports will also be presented to the client. The individual transfusion reports are proprietary and will not be retained by the client. The summary report will detail historical and projected transfusion costs and will be retained by the client.



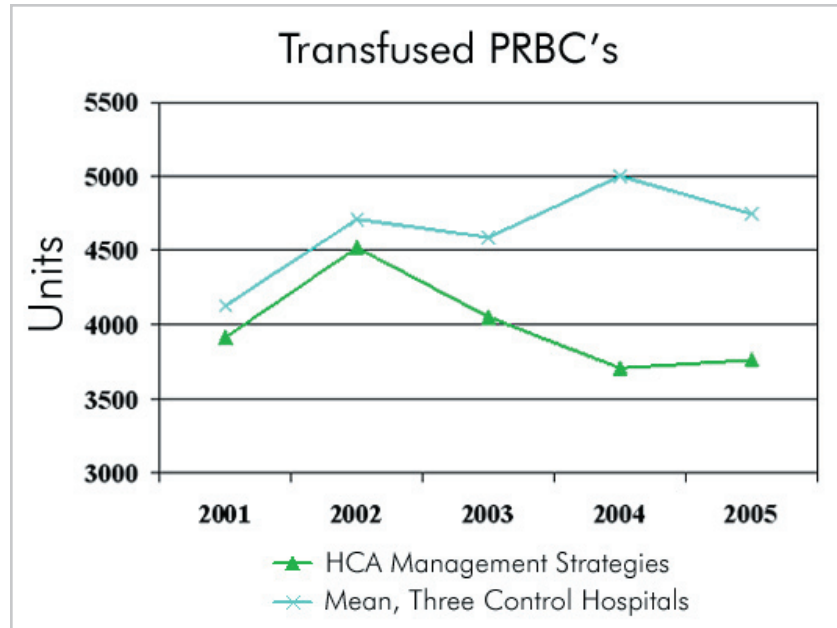
## Consultation Fees for Performance Impact Assessment of Blood Usage

There will be no fee charged if this study does not identify a single concern regarding blood usage. Otherwise, a reasonable cost-effective fee will be charged.

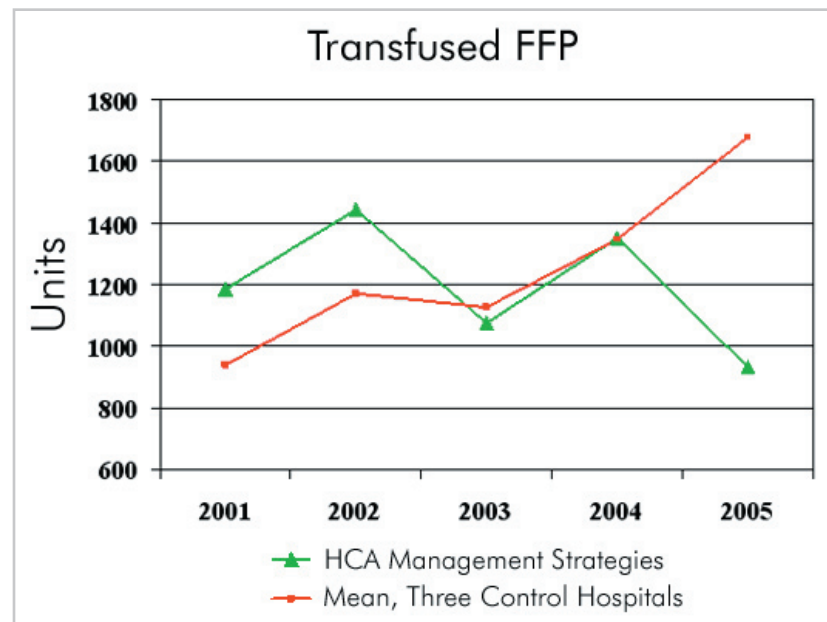


## Results

Columbia Healthcare Analytics' strategy reduced Packed Red Blood Cell transfusions 31% when compared to community use, preserving 1146 units for the community and saving \$223,470 in blood supply costs.



Our strategy further reduced fresh frozen plasma transfusions 45%, compared to other community hospital use, preserving 747 units for the community and saving \$41,085 in blood supply costs.





## Service Proposal for Subsequent Utilization Management

Columbia Healthcare Analytics, Inc. can manage your transfusion utilization review program including Absorbing current client costs associated with transfusion utilization review, and providing:

- Performance data sufficient for regulatory and accreditation compliance.
- Performance data by physician, if clearly identified by records.
- Performance feedback to the physician, through the department chair or other designated contact, within 21 days of discharge.
- Monthly performance data regarding nursing administration of blood components.

## Compliance License Program

Columbia Healthcare Analytics, Inc. services are fully compliant with HIPAA regulations. We forward and analyze only medical documents from which personal information has been completely redacted at the client site. A full audit of this process is available for the client at any time.

A copy of the compliance plan for Columbia Healthcare Analytics, Inc. is available for inspection. Columbia Healthcare Analytics, Inc. will notify the client within 3 hours if a breach of any business protocol is detected and will take corrective action immediately to ensure the integrity of the operational protocol. Columbia Healthcare Analytics, Inc. will indemnify the client in all cases of deviation from protocol arising from handling of confidential information by our agents.

## Proprietary and Confidential Information

Columbia Healthcare Analytic, Inc. programs are proprietary, confidential and intrinsic to the success of our business model. Clients must respect the confidential nature of our programs. Therefore, as a condition of consultative services, detailed knowledge of analytic tools developed by Columbia Healthcare Analytics, Inc. must be restricted to only the client's chief medical officer and the chief legal officer. Clients are required to sign a confidentiality agreement with Columbia Healthcare Analytics, Inc.

A client will be prohibited from using or disseminating without prior written permission any process developed by Columbia Healthcare Analytics, Inc.



